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LABOR AND COMPENSATION

BY

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Head of the Industrial Service Department
of the Emergency Fleet Corporation*

VOLUME 7

FACTORY MANAGEMENT COURSE

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PREFACE

This volume is probably the first to present the details of what has come to be generally recognized as the new science of man-management. While the use of the term science in connection with a new, and as yet largely experimental, procedure, may be somewhat premature, nevertheless "scientific method" does mark the sounder aspects of practice in this field of industrial organization. There is developing a body of knowledge, experience, and principles in connection with the handling of the working force, and this development is going on along increasingly systematized and well-informed lines. We have, therefore, at least promising beginnings of both a new science and a new art of handling men as producing groups.

No executive, whatever his role in an organization, can afford to work unaware of what has been accomplished within recent years in bringing men and managers into closer relationships. Young men entering the field of industry, many of them some day to be directors of departments and enterprises, would do well to post themselves on the new ideas which successful managers are incorporating in their policies and practices. We are living in a new time, the most wonderful the world has ever known. This book aims to interpret the meaning of this new time in terms of sound managerial practice and initiative. It supplies practical programs of action. It shows what is being done to make modern industrial administration conform to the dominant, humanizing ideas of present-day industry.

One controlling aim may be observed throughout the chapters: to deal with real things, to show what has been done, and done in a large and profitable way. The record is inspiring. Managers who think out in a broad-visioned way their problems of contact with the men whose work they direct have found a new interest and incentive in their work. The time has come to make their work and views better known. What has been accomplished was not easily done. A price had to be paid, criticism and possible failure had to be risked. The price has been paid, but the results show that the achievements were worth the cost. Others who follow, or who strike out in new directions along the line of man-management, will not have so much uncertainty to face, thanks to courageous fore-runners.

This volume is a manual of the new viewpoint and the new practice. It is a guide to new possibilities of co-operation between employers and employed. Labor has come into a new dignity; management has become a profession. These facts spell industrial advance. To render assistance to every executive who has anything to say as to the work of others, in order that he may carry on his duties in such a way as to build up the spirit of organization and team play, is the basic aim in the pages which follow.

In the labor of securing and organizing the material of this volume, invaluable assistance in the form of suggestions, criticisms, and personal help were generously given by Daniel Bloomfield, Philip Davis, and Frederick J. Allen, each a specialist of high standing in his particular work.

MEYER BLOOMFIELD.

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LABOR AND COMPENSATION

CHAPTER I

WORK AND MEN

The Human Element.—What is the greatest problem before an industrial executive? Ask any number of managers of large businesses what question gives them the most concern, and they will invariably answer, "The question of men." The problem of the human element outranks in importance any other in industrial organization.

Methods, machinery, raw material, all sorts of devices in the way of system and economies may be studied, copied, bought and obtained by any manager, on terms. There is no mystery, no special difficulty in securing standard conditions. The price is known, the amount of effort measurable.

Not so with the human element in industry. Good men and sound organization cannot be bought in the open market. And the qualities which go with the right working force and organization are not to be had by mere wishing, or even by an outlay of money.

The most important of all factors in industrial success is the human factor—the greatest of all administrative problems is that concerned with the right selection, assignment, training, supervision and treatment of men.

A Problem to Study.—The importance of this subject grows year by year. The very possibility of staying afloat, as well as of developing an establishment, will depend more and more on the quality of the working force—the rank and file.

Given a system of securing the right men and enlisting their support, nothing under normal conditions can arrest the growth of an organization. With such a system lacking, the march is uphill on slippery ground studded with rocks.

Here is what the greatest inventive genius in history says on this point. Mr. Thomas A. Edison writes:

Problems in human engineering will receive during the coming years the same genius and attention which the nineteenth century gave to the more material forms of engineering.

We have laid good foundations for industrial prosperity. Now we want to assure the happiness and growth of the workers through vocational education and vocational guidance and wisely managed employment departments. A great field for industrial experimentation and statesmanship is opening up.

Every consideration of ordinary business prudence suggests concentration on this problem. Moreover, the successful advance of organizations which have in recent years gone to work on this problem in an effective manner compels attention, not to say admiration.

Prudence, successful experience, and pressure of what we might call the spirit of the times, then, all combine to suggest serious interest, intelligent study, and informed experimentation in the field of what

may be roughly termed the science of man-management.

Now all this is not a business for sentimentalists. Both the art and the science of handling men imply an open-mind, willingness and capacity to look facts squarely in the face, capacity to draw sound conclusions, and courage to follow the hints of experience.

Watching "Symptoms."—Even executives of little experience or ability to interpret the meaning of events and the trend of the times, are frequently aware that the mass of workers are undergoing some fundamental change of attitude.

In times past, say a generation and longer ago, the program of an industrial executive covered only in an incidental way, if at all, the questions affecting the well-being, the rights, the needs, the desires and the possibilities represented in the working force. If an employee was discontented, no matter for what reason, he had only one possible solution for his problem—quitting. If the management, or any minor executive, a foreman, or a gang-boss was displeased—whatever the cause—discharge was the obvious result. Why should the management bother, when men were glad to get any job? Why invite trouble by monkeying with that mysterious thing known as human nature, or that more unaccountable force known as employee-nature? The solutions were too simple to call for any such idea as a science of handling a working force.

Today disaffection of any sort is to the intelligent executive a symptom calling for intelligent diagnosis. It may be a danger signal, prompt response to which

may save an organization, an industry. Symptoms do not demand suppression in enlightened practice; they demand skill and head work. This is as true in management as it is in medicine.

But disaffection is not the only signal and symptom of conditions which invites attention. There are numberless items in organization all of which challenge managerial and organization skill. Trouble is only the result of neglect. Wisdom does not wait for a break before taking action. That is a negative attitude—a most dangerous disqualification in an executive. Successful administration, according to modern standards, is affirmative, preventive, and constructive. It anticipates, uses foresight, analyzes, investigates, compares, interprets, and understands. It is guided by facts and a sense of reality, and not by prejudices, inertia and outworn phrases. These qualities are as true of organizations as a whole as they are of those who have places of power within them.

Day by day, in any assemblage of wills and purposes, which we call an organization, the danger posts, signal-flashes, and challenges to constructive intelligence are visible to those who have eyes to see. One type of mind either ignores them or belittles them, another is moved by them to earnest thought and action.

Man-Management a Growing Science.—Now man-management is becoming a science and a profession, because the new age has instilled in every individual worker a sense of self-respect, civic duty, and a philosophy of industrial relations.

Not that this philosophy is always clear, articulate

or even sound. The point is that the producing unit which we call the workingman has a positive viewpoint, an attitude, a state of mind and a body of sentiment and ideas definitely influenced by the spirit of the time, the literature of the day, the press, the legislature, his fellow-workers, and the practice of enlightened employers. Wise co-operation with this modern force represents the high-water mark of good management.

That the foregoing is not mere theory is demonstrated by the wonderful growth in recent years of a chain of employment-managers' associations extending from Boston to San Francisco. It is also confirmed by the equally marvelous development of functionalized employment or personnel departments in many of the large business and manufacturing establishments of the country.

Indeed, plants and stores employing as few as five hundred workers have been as active in attempting to solve their man-management problems as have those employing ten and twenty times that number. The story of what both large and small organizations are doing in bringing men and management closer together in common tasks is a new chapter in our industrial history.

What Is Welfare Work?—As has already been intimated, the incentive for this development has been neither a sentimental notion of management nor a wish to offer philanthropy to the worker. Sentimentalism and charity have no place in a business organization. They are misapplied most pitifully to the American worker willing to earn his own salt.

They confuse relationships, befog the duties of the organization, and humiliate the men. And on the side of management they indicate weakness or liability to self-delusion.

These remarks are not to be construed as implying a hostile attitude toward what is generally termed welfare work. Such work is a positive good when rightly conceived and administered, but it should never be regarded as a charity or a concession. Either it helps an organization or it doesn't. If it helps it is an asset, as it really should be, as much as a fireproof and well-lighted building, good ventilation, a sprinkler system, improved machinery, provision against overstrain, and many other features of an up-to-date plant. If welfare work is not an asset, then it is likely to be given up. In other words, whatever an organization does to promote good work, stability, and goodwill, counts in favor of good organization. Protection of health, freedom from worry, good lunch rooms, rest rooms, playgrounds, mutual-aid benefits, vacations, and training programs, are signs of good management. The absence of these provisions is a sign of antiquated management.

Underlying all welfare work, however, must be an organization founded on self-respecting and capable attention to the fundamental problem of a progressive, and growingly responsive and responsible, working force—of men and women who find in the work they do and in the organization they have attached themselves to, increasing incentives to efficiency and to the upbuilding of their manhood and womanhood.

Such purpose implies a new sensitiveness to the

coming and going of employees, the process of discharge and resignation, the leakages of employees—in brief, the labor turnover. The prevailing interest among employers of the country in this turnover problem is not due so much to shortage in the labor market as to a realization of the many valuable lessons a manager can learn when he studies the reasons why men come and go. In studying this constant shifting of labor, executives have learned something about undiscovered wastes, inefficiencies in the plan of management, and disqualifications of men who hold important executive positions.

This is one reason for so lively an interest in the problem of a stable working force. Another reason is of course, appreciation of the fact that nothing so promptly promotes good work and right relations as a working force interested in staying and forging ahead. No organization can thrive on a foundation of quicksand. It has been found that waste of human material through the irresponsible discharge of workers and through their quitting voluntarily, causes a positive slowing down, an arrest of necessary motion. The cost of turnover, then, is found in a general and all pervasive inefficiency. It means a breakdown of spirit, and a multiplication of many kinds of waste.

A Concrete Case.—The care with which a certain great, forward-looking organization is facing its duties toward a working force numbering over twelve thousand is well shown by the following schedule, which the management of one of the world's largest metal-mining companies is minutely considering.

Every question here given has been placed before a responsible executive for him to answer, and the answers are gone over at conferences attended by the president himself, the general manager, and other important officials.

QUESTIONS IN INDUSTRIAL RELATIONS

The Executive Office:

Is there any book or manuscript, or other form of record, which can be consulted by any executive, giving the fundamental policies of the company as regards the handling of the employees?

Has the matter of a "policy" book been taken up with the executives, and their co-operation secured to organize such material?

Could a committee of the executives be appointed to frame for the men in authority a statement of the controlling policies?

How are the executives informed systematically as to what the management desires in the way of treatment of the men?

What check, or control, or follow-up, is there to watch the results of each executive's method of building up good relations?

What views do the executives have as to the best way of promoting loyalty and good will?

What record is there of individual disciplining, etc., by the executives?

How do the executives differ in the way they tackle the question of handling men?

How well are the executives posted as to the methods used elsewhere?

Is there any system of keeping executives in touch with industrial problems?

What suggestions are being made by the executives in the way of furthering the aims of the company as regards conditions, treatment of men, etc.?

Who is responsible for "maintenance" of right relations? How do the executives instruct their juniors, bosses, captains, as to the matters above?

What instructions have been issued to the employees as to the policies of the company?

How are they followed up?

Minor Executives:

Are there regular conferences of the captains, etc., to post them as to the labor policies of the company?

What co-operation is secured from the captains in maintaining right relations?

Are the captains rated for their treatment of the men? What views have the captains as to the best way of handling men?

What suggestions have the captains made to promote right relations?

Do they freely express themselves as to what adjustments need to be made, or enforcement to be secured?

What is done to interest them in maintaining good relations? What check or abuse of their authority? Ill-treatment of men, favoritisms, etc.?

What captains have the most men leave them? For what reason? Are the reasons investigated? How?

What captains have the best record of steady force? What is the explanation?

What recognition does the company give successful managers of men?

Have the captains or other group of executives the right to hire and discharge?

What records are kept of this work?

Do the captains give employees an insight into the spirit and policies of the management?

Do the captains have any systematic way of learning about the needs or troubles, at home or elsewhere, of the men?

Are the captains helping them personally in any way?

How are captains made—by promotion, or do they come from the outside?

Is there any conference or organization of the minor executives for the purpose of exchanging views, experiences, etc.?

The Working Force:

Besides the main office, how can the men make their complaints, suggestions, etc., without risking the displeasure of their immediate superior?

How are the earnings of the men checked up as to their adequacy, fairness, advantage of opportunity, etc.?

Have the men any suggestion committee, welfare committee, etc., along the lines of the safety committee?

How are the men encouraged to make suggestions of benefit to the company or the men?

Is there any bulletin, magazine, or other publication printed by or for the men to promote common spirit and co-operation in the policies of the company?

How are the men protected against ill-treatment, underpayment, prejudice, discharge?

What counsel do they receive in the way of thrift, mutual benefit?

How are they encouraged to organize activities of help to themselves and their families?

How are they helped to increase their efficiency and their earnings? Is there any definite training or instruction scheme?

Who gives the instruction? Is it given in the most efficient way? Would more men be attracted to the work if a better plan of initiation could be worked out?

Can men secure better wages or conditions elsewhere in the region? Is there any portion of the men worse off than the men doing about the same kind of work elsewhere? What method of getting facts for such comparison is used?

What further benefits, improvements, advantages, etc.,

does the company plan for the men in the near or distant future?

What is the company doing to protect itself against possible charges some time of paternalism, autocratic control, and similar statements usually made in times of strife?

What policies are at work or under way which encourage the initiative and co-operation of the men?

Human Stock-Taking.—Nothing less than such a thorough-going human inventory will do. The questions above printed, one can readily see, get to the root of things. Nothing is taken for granted, no lazy assumptions are tolerated. Although success has attended the administration of this company, its leaders are unwilling to let tradition or self-satisfaction cloud their judgment or interfere with a clear view of the facts.

The first step, then, in personnel management, in establishing genuine contact with the rank and file, is to institute a realistic human stock-taking. Every organization would do well to devise a schedule suitable to its own purposes. But the making of such a schedule calls for the best thought and effort, while the answers require the most rigorous scrutiny and criticism.

In the investigation above referred to, the mine officials found many valuable and unexpected by-products, apart from the benefit of the main inquiry as a whole. The very process of inventory focused sharp attention on the quality of the executive officials, on the quality of the information which they habitually obtain, and on the nature of the hurdles between the management and the rank and file. The

latter could not ordinarily be expected to surmount the hurdles when eager to communicate important information to headquarters, without a much more energetic effort on the part of the management to open the channels of contact between workmen and bosses all along the line.

Granted a widespread interest on the part of managers in the question of the human factor in industry, it is clear that a beginning such as has been made by this mining company is one of the most promising and valuable possible.

Establishing Contact with the Men.—How shall we establish the right sort of contact with our men? How can we know our men? These are the vital questions every executive asks.

There is no royal road, no magic means. The same hard-headed sense that has been found effective in other branches of management is needed here. But in addition it is necessary to cast aside tradition, assumption, and self-complacency. What is needed is a fresh facing of facts, a courageous willingness to make every exertion to see the truth about the every-day working force and the every-day conditions which have become too familiar to managers to present any sharp or outstanding features.

The accomplishment of this end calls for quiet, painstaking, and unrelenting inside investigation, it implies, too, the open mind—and a sympathy with men and their aspirations. To be impatient with the desires of men, however crudely such desires may be expressed, or however annoyingly, is to miss a great opportunity. Good management brings no cushioned

ease. On the contrary, it is steady exertion, and counts no cost too great if only truth results. No lazy man can ever succeed as a manager. Conceit is fatal to organization. No man is so valuable that an organization may permit him to dilute or dis-color the facts with his personal opinion.

It might have been wiser to suggest that the manager make a self-survey before beginning a personnel survey. Perhaps this is the first step toward good organization. A manager might well settle first of all such questions as these: How much do I really care about the men on my payroll? What am I willing to give them of myself? What will I do for them other than what I am forced to do? Do men fear me? Do they respect me and my work? Have I the patience and good-fellowship to hear their side and credit them with motives as good as mine? Would they express themselves freely before me? If not, what is wrong with me? Would I trust myself and them sufficiently to help develop a more co-operative management?

A Man's Task.—The labor market still determines to a large extent just what men are available for employment. But it is the management which has the say as to what kind of organization within the establishment there shall be, and what the relations of the men to the management shall be—in a word, what kind of men the employees shall be or shall appear to be.

Here is a task, then, for real men. Prevention of trouble is good, but promotion of goodwill is better; freedom from friction is desirable, but lively inter-

change between mutually trusting and alert co-workers brings infinitely larger results.

The field of personnel management is large. All sorts of executive capacity is needed if its many phases are to be worked out. No one manager, and no one plan has covered them all. There is much to learn, however, from both present successes and failures; from managers both of the old and of the new type.

The art and the science of management, therefore, approach the tasks from the angle of preventable waste and friction in the human organization, and from the angle of experimentation in ways to promote organization spirit and the incentives to right relationships.

CHAPTER II

EMPLOYMENT METHODS

“Inventions” in Industrial Relations.—In considering the art and the science of man-management, it is important to consider the proofs. It is helpful to know theory and general counsel, but it is more helpful to look at the actual carrying out of the principles in this important field of industrial service.

A manager will say, “I believe, of course, in treating men well. I want to have as good an organization as any one else. But is it possible to go much beyond the lines that past experience has marked out?” Here is the rub—past experience is the result of hard and fast rules, of conditions that no longer obtain. Managers do not today use the machinery and the production methods of twenty-five years ago, any more than they use stage coaches and canal boats in a journey from New York to Chicago. One of the most important lessons that every successful manager has learned, is the necessity of scrapping policies and schemes of man-management quite as freely as he scraps tools improved upon in the process of invention. In other words, there is a kind of invention going on in the field of industrial relations which, though not recorded in the Patent Office, is quite as real and effective, and at times as revolu-

tionary, as is any product of the inventive skill of American craftsmen. The necessity of keeping in touch with inventions in the "human-relations" field, constitutes a new demand upon the modern executive. Moreover, this field has grown to large proportions, and offers hints and lessons of far-reaching importance.

Lessons from Various Fields.—It is the privilege and the pleasure of the broad-minded executive to look for help wherever it may be found. He does not limit his search to his own field of work. If suggestions may be had from industries quite different from his own, he gladly makes use of them, irrespective of their source. A machine shop, though facing problems altogether different from that of a department store, may yet obtain from department store management a clue that will be of value. The president of a great street-railway corporation some time ago asked an investigator of industrial matters to report to him on every item in labor-management which came to his notice, no matter in what field. "It is your business to tell me of anything that is being done," he said, "and mine to use my judgment as to how far we can apply the methods to our own company." This surely was a fair division of labor.

Therefore, in describing the methods used, I propose to state the record of achievement in the various fields of man-management, in order that the fullest possible benefit may be derived.

The department store, for example, has worked out, and is still working out, such significant methods in the handling of employees, that no manager, what-

ever may be the nature of his work, can afford to remain uninformed in this respect. As a matter of fact, many corporations in the manufacturing field acknowledge their indebtedness to the leaders in department-store practice for important ideas in their own labor policies. But besides department stores, insurance companies, railroads, and even institutions of a semi-business or non-commercial character—like universities—oftentimes have much to impart with respect to the proper procedure in man-management.

Edison Company's Personnel Work.—The Thomas A. Edison Company of West Orange has one of the best organized personnel and employment departments in the country. An Edison Guide Book—a small pocket-size publication—is given to each employee in order that he may clearly understand the personnel work of the firm and lend his hearty cooperation. This book contains some valuable suggestions to executives who wish to provide their working force with a knowledge of the controlling policies and the dominating spirit of an organization, some of which are reprinted here.

Purpose: We want all Edison people to become acquainted with our ideas, methods and policies and to feel at home. This little guide book is issued to help you to that end.

You are a part of a big organization and we want you to feel that we are interested in every individual associated with us.

Starting Work: Individuals engaged should report at the time and place as instructed at Employment Office. If the work you are to do is simple you will probably be put on it

at once. If it requires skill, you will be instructed to watch a skilled workman until you have gained a good general idea of how it is to be done, or you will be instructed by foreman, or in such other manner as he may direct. Remember that time and patience are required to learn any operation. During the first day, do not take notice of *how many times* you do an operation, but rather strive to do it as *well* as you can. Our most successful workmen are those who first used their skill to turn out a good piece of work and acquired their speed afterwards. Remember that the foreman is here to help you over the rough places by helpful hints and instructions. He is ready and willing to help you with any of your difficulties if you will only make your wants known to him. Do not forget, if you find your progress slow and the outlook discouraging, that the skillful men have been through the same experience that you are now going through. They showed their perseverance and grit and are now earning good wages. Stick to it hard the first few days, learn the whys and wherefores of your job and the speed will follow naturally.

Holidays: The following legal holidays will be observed, except where the Management may otherwise designate: New Year's, Decoration Day, Fourth of July, Labor Day, Thanksgiving and Christmas.

Night forces will be instructed as to reporting for work on the above named holidays.

Factory Hours: The regular factory hours shall be as follows, except where the management may otherwise designate:

Day Forces: 7:00 A. M. to 12:00 Noon and 1:00 P. M. to 6:00 P. M.

Night Forces: 6:15 P. M. to Midnight and 12:30 A. M. to 6:45 A. M.

Clock Cards: Ring "IN" when entering in the morning; ring "OUT" at lunch time; again ring "IN" when returning from lunch, and ring "OUT" at closing time. For over-time

turn the indicator to proper position and ring "IN" when starting the over-time and "OUT" when the over-time is completed. Always see that your clock card is properly punched when entering or leaving and that it is properly placed in the rack.

At leaving time women may ring "OUT" at five minutes before the regular closing hour, provided they immediately obtain their wraps and proceed direct from the premises. This also applies at lunch time, with the exception that they are not required to leave the premises.

Badges: In order that you may have proper identification the standard badge of your department or division will be issued to you when you start work on your second day. When you come in to start your second day call at the Employment Office a few minutes before starting time and your regular badge will be issued to you. Your "Pass For First Day" should be turned in at that time.

A receipt will be taken for the badge and a charge of one dollar made if it is not returned.

The badge at all times remains the property of the company and is not to be transferred to any one.

Your badge is to be worn on left side on level with arm pits.

If you leave your badge at home through oversight a pass for one day only will be issued to you at the Employment Office. If this occurs a second time you will be expected to return home on your own time to get it.

If you are transferred to another department your old badge should be returned in at the Employment Office and a new one will be issued to you.

If you lose your badge notify the Employment Office at once either in person or through your foreman.

Badges found in the possession of anyone other than the person to whom issued at the Employment Office will be taken

up by the watchman or gateman. Do not allow anyone to use yours.

Your badge will admit you to the Employment Office at any time.

Passes: At the time you are engaged at the Employment Office you will be handed a pass in duplicate. One portion of it will be taken up when you report for work the first day. The other portion is to be presented at the Employment Office when you call for your regular badge at the start of the second day.

Overtime Pass: This will be handed you by your Foreman and will be taken up by gateman when you enter to start the overtime.

Package Pass. When you wish to take a package away from the plant your Foreman will take the package and hand you a duplicate of the pass which is attached to the package. You can obtain the package at the Gate by presenting your duplicate pass.

Exit Pass. In case it is necessary for you to leave through a regular exit at any time except at regular leaving time a special pass will be issued to you by your Foreman.

Absence: If you find it necessary to be absent, notify your foreman in advance. This will enable him to make plans for taking care of the work and the company will appreciate your consideration. If sickness or any other emergency prevents your reporting for work notify your foreman through a fellow workman or have someone telephone the Employment Office. If telephone is not convenient send a letter or post card. If absent from work more than three consecutive days, without having consulted your foreman or notifying the Employment Office your name may be dropped from the pay roll. If you are absent for two or more days on account of sickness or for a reason not known to the company call at the Employment Office when returning. The office is open from

6.45 A. M. to 6:30 P. M. This does not mean that you must be re-employed but simply that the management is carrying out its policy of keeping closely in touch with the interests of each individual associated with it. You will be reinstated in such cases if the position has not been permanently filled, and in any event your call at the Employment Office will enable us to do everything possible for you, under the circumstances.

If necessary to stop work or leave the factory during working hours, consult your foreman who may issue pass which must be deposited with the gate keeper at the time you leave the factory premises.

Payment of Wages: Wages will be paid only upon the presentation of the clock coupon signed, (or, where the clock coupon is not used, your identification card),—at the regular pay roll time and place. See your foreman for further information as to the pay day for your Department.

You must not execute any assignment of wages, nor any power of attorney authorizing someone else to execute an assignment of your wages.

Transfers: In view of the fact that a centralized Department has been established for action on matters affecting individuals associated with the Edison Interests, those wishing to be transferred from one Department or Division to any other Department or Division should first take the matter up with their foreman. He will co-operate with the Division Manager and the Personnel Service Department to the end that proper consideration be given your request. Do not leave your position with the expectation of going to another in some other Department or Division of the Edison Interests unless you have arranged to do so in the manner above outlined.

Promotions: It is the policy of the Edison Interests to

fill higher positions wherever possible with men taken from within the organization.

Resignations: In case you contemplate leaving the employ of the Edison Interests, notify your foreman one week in advance. In addition to this you are expected to call at the Employment Office for an interview. Authority to pay final wages will not be issued until this interview has taken place. Whatever wages may be due will then be paid at the regular time and place.

Recommendations: Letters of recommendation are not issued to persons who leave the service of the Edison Interests. However, any inquiries made concerning those formerly affiliated with the Edison Interests will be gladly answered by the Personnel Service Department.

After you have become familiar with the work, and if you have decided that you like to work with the Edison Interests, you may recommend friends and acquaintances whom you know to be thoroughly qualified for a position with these Interests—using Form No. 1658, which may be obtained from your foreman, or at the Employment Office of the Personnel Service Department.

Accidents: Always be on watch to prevent accidents. Immediately send in suggestion for any accident-prevention device or precaution which you may observe.

In the event you are injured, report it to your foreman immediately, no matter whether you consider it trifling or not. Disregard of this may result in serious permanent injury to yourself and incapacity for work. If any other person nearby needs attention and is unable to make request, notify foreman promptly.

Accident reports of all cases will be sent by foremen or Division Managers to Personnel Service Department.

The Edison Interests will not accept bills for service rendered any person on account of sickness or accident, unless

such expenses are properly authorized in advance by the Health Service Department.

On account of danger from machinery, etc., women must not allow their hair to hang loosely.

Dispensaries: Dispensaries have been provided, where, in case of accident or serious illness persons associated with the Edison Interests will be given first aid treatment free of charge.

Fire: If you discover a fire, ring the nearest fire box and then upon arrival of the proper authorities direct them to the fire. If you discover a fire in another building some distance away from you call the telephone operator and state the location of the fire.

Fire Drill Instructions: Fire drills are for the safety of all, and you should assist in successfully conducting the drills, realizing that your own safety is greatly increased thereby. The strong should assist the weak.

Organization of Fire Brigade: Your foreman is in immediate command when the fire alarm signal sounds. Floor Captains are in direct control of each floor and their instructions should be carefully followed. Floor Captains will designate when and by what doors you are to leave the building. Wait until you receive his command to march. Follow your aisle leader.

When Alarm Sounds: Stop work; shut off power; stop machines; shut off gas and other open flames; close doors and windows opening upon or under fire escapes; put chairs, tools and other obstructions on top of or under benches to clear the passageway; form line promptly (in column of twos) with the front of the column facing the usual exit aisle—with women in front—and wait the word of command from the Floor Captain.

At Command to March: March in a rapid, orderly manner from building, two abreast as instructed, not crowding

upon the couple immediately in front of you—following your aisle leaders. Preserve the interval in the line between yourself and the couple in front of you. Retain formation until dismissed, or the line is returned to building. Women always have the right of way.

In Case of Fire:

- Don't* run;
- Don't* lag behind;
- Don't* break up columns;
- Don't* laugh or talk;
- Don't* scream or make unnecessary noise;
- Don't* cause confusion;
- Don't* remain in toilet or dressing rooms;
- Don't* return for your clothing;
- Don't* try to use elevators;
- Don't* attempt to leave the building except in accordance with the fire drill regulations;
- Don't* fail to assist in carrying out instructions.

Grievances: It is the policy of the Edison Interests to deal justly and equitably with every individual associated with any of the various Divisions and Departments of the organization. In the event that you feel you have a grievance take the same up with the head of your Department. Then if you should still feel that you have not secured justice, take the matter up at the Employment Office. The Personnel Service Department will make such further investigations and recommendations to the proper officers as shall assist you in obtaining a satisfactory hearing and a just decision of your case.

Personal Deportment: Spitting on the floors or in any place except into the cuspidors provided for that purpose, is prohibited.

Smoking on the factory premises is prohibited under state laws.

Drinking of liquor in any form, whether done during working hours or at other times will not be tolerated, and any employee so doing will not be retained.

Always be courteous and have consideration for the rights and privileges of others.

Clean and Orderly Condition of Premises: In order that working conditions may be the best possible, it is necessary that you do your part in seeing that the premises are at all times kept clean and in good order.

Marking walls or defacing buildings is positively prohibited.

Waste material, oily waste, garbage, waste paper, etc., should be put in the containers provided for that purpose and must not, in any case, be thrown about the premises. Your failure to follow instructions in this respect increases the fire hazard and may endanger the lives of everyone nearby.

Throwing waste, garbage, papers or other objects from factory windows must not be indulged in. It is dangerous to persons passing the buildings.

Avoid running through the factory buildings. The practice is dangerous to yourself as well as others.

The space leading to each fire escape or fire extinguisher must be kept clear of all obstruction. Fire doors on elevator shafts must be kept closed except when elevators are being loaded or unloaded.

The entrance leading to and from hallways should at all times be kept clear and unobstructed. Trucks must not be left standing in the halls or passageways. If elevator is not immediately available, trucks should be placed in the vicinity of the elevator but in such manner as to leave the hallways clear and unobstructed.

Tools: A charge will be made against you for all tools and supplies which you receive from the Tool Room.

To receive full pay when leaving the employ of the Edison

Interests, the "Return" (Form No. 1657) to Personnel Service Department must indicate that you have turned in all tools, checks and other Company property. The proper charge will be assessed for each article not returned.

Use of Elevators: The elevators in the factory buildings are intended for transporting freight only, and should not be used except when operating hand truck or taking goods from one floor to another.

Officials: Organization charts are posted in the offices of various Divisions and Departments which clearly show officers and executives responsible for the different lines of activity. Consult your Foreman in case you wish information on this subject and a chart is not conveniently located for your examination or apply at the Employment Office.

Suggestions: The management is at all times glad to receive suggestions of any nature from you, and boxes for these suggestions have been placed at convenient places throughout the buildings. Your hearty co-operation in this respect is solicited. We should all work together in improving men, methods and machines.

General Instructions: Be at your Department and ready for work at the regular starting time.

Loitering in the halls, toilets, or on stairways, etc., is not permitted at any time.

Visitors on personal matters are not allowed during working hours.

Do not visit any person in any Division or Department at any time except on Company business.

Telephone messages of a personal nature will be delivered only in cases of urgent necessity. All messages of this kind may come through the Employment Office.

Beer or liquors are forbidden, at all times, on the premises.

Gambling of any kind is forbidden, at all times, on the premises.

Promptly notify the Employment Office of any change in your address.

Read the Bulletins posted in your Department.

Visitors will not be permitted into the plants of the various Divisions without a suitable pass properly signed.

Soliciting for private enterprise, charity or sale of tickets for raffles, entertainments, etc., will not be permitted at any time.

READ—THEN SIGN!!

Upon entering the Edison employ, I realize that there are certain definite things I ought to consider, to avoid accident or injury to myself. I realize that injury will not only keep me from work, but cause me to lose money and prove a hardship to my family and to those dear to me.

It is with this thought in mind that I hereby agree that:

I will wear goggles while operating grinding machines or other machines where I am liable to eye injury from dirt and flying chips.

I will use all safety devices and will call the attention of a fellow worker to his failure to use them.

I will not use a defective tool or machine but will call the foreman's attention to it at once.

I will not clean my machine while it is in motion nor attempt to remove tools or materials until the machine has stopped.

I will not fool with electrical apparatus or air hose, nor play dangerous practical jokes on my fellow workmen or allow anyone else to do so if I can prevent it.

I will not use defective chains or hooks, rickety scaffolds, weak or broken ladders or those not provided with spikes.

I will turn down or remove all upstanding nails or spikes that I may see.

I will never allow anything to stand in an aisle or passageway so as to obstruct it.

I will be careful in handling material and will not allow it to be moved unless chains are properly attached or the material properly loaded on trucks.

I will wear close fitting over-clothes and will not wear a necktie unless it is confined beneath my jumper.

I will not wear gloves around revolving machinery unless the fingers are cut down to the second knuckle.

I will report at the Dispensary to receive treatment for all injuries however slight may be their nature.

I will do everything within my power to make the Safety First Movement a Success, Because I Know that I am the One to be Benefited Most.

Signed

Commonwealth Steel Company.—The Commonwealth Steel Company, of St. Louis, with its working force of over three thousand men, is noted for its so-called Good Fellowship Club. Clarence H. Howard, President of the Commonwealth Steel Company of St. Louis, conceived the idea of inaugurating welfare work among the employees at the steel plant, ten years ago, and thus laid the foundation for what has since grown to be one of the most successful co-operative schemes in this country. The Good Fellowship Club of the Commonwealth Steel Company, with its more than 1,000 earnest members, its splendid new clubhouse, and its indomitable spirit of “get together,” has shown that employer and employee need only to be fully informed of each other’s problems to insure avoidance of disputes.

About the first thing President Howard did was to inquire about the young men in the plant. He wished to know whether they liked the work, and

whether they were in the right places in the shops to work out their ambitions. The young men were at first a bit bashful in the presence of "the big boss," but as soon as they found that he was talking with them, and not at them, they became quite confidential. As a result of his information Mr. Howard formed the Good Fellowship Club, and at once started a night school to complete the education of employees who had been forced to go to work young.

Volunteer instructors from the drafting rooms gave lessons in drawing and mathematics. Later the attendance grew, and the company hired experts to teach. It was found, however, that the young men, after a hard day's work, were fatigued and could not get the full benefit of the courses. Finally a day school was established, and every young man in the plant not yet twenty-two years old was put into the school one morning or one afternoon each week, during which time he was paid as though he were working for the company and not for himself. There are now about 120 men getting the advantage of the school, and the results are said to have been beyond expectations.

There is a bit of real Americanism in the fact that the only requirement to enroll for the courses is the ability to read and write the English language. In addition to the technical branch of the school, a complete course in commerce is given for the clerical force. Employees are graduated after a course of four years.

About 35 per cent of the Commonwealth employees are foreigners, and the problem of how to get

into intimate touch with them was difficult, as the men were suspicious of the company's intentions. In an attempt to solve the question, an expert in welfare work was employed, who went to board with a family in the foreign settlement. Educational meetings were organized and the people were taught that the true American spirit was co-operation. A short time ago a committee of foreigners went to officials of the Steel Company, and said that "Hungry Hollow," as the settlement was called, didn't seem to fit their neighborhood any longer; they thought that "Lincoln Place," was more in keeping with their new ideals. Later a school for foreigners was established, with all academic subjects in the course. Special stress, however, is laid upon instruction in methods for safety while at work.

One thing that has pleased the men is the method of employ and discharge in operation at the plant. When a man makes application for employment, he is rigidly examined as to his ability. This is done to protect the men already at work, and to provide that they shall not have to bear the burden of working with men not as skillful as themselves. If the applicant proves his fitness he is examined by a physician, and if his health is good he is hired. This medical examination works against the introduction of diseases to other workmen. No man is ever "fired." If complaint is made about him, the charges are laid before a committee, and the continued employment or discharge of the man rests solely upon the committee's decision.

In order to bring to the men realization that their

own prosperity depends upon the manner of service they give, a prize system has been put into effect. Under the system, the entire administrative force of a shop receives a percentage of their monthly salaries, if the shop record in efficiency, safety, and production justifies it. This has aroused a joint interest, and the workers have come to feel that they are, in fact, partners in their employer's success.

The question of safety has received attention by the installation of a well-equipped laboratory, with a surgeon in constant attendance, at the plant. To impress the importance of care, lectures on safety are given frequently. The company's desire to have the worker united with the officials in all matters of mutual interest, is further exhibited in the safety work. Boxes have been placed all over the plant, and employees drop suggestions into them. For the best suggestions a monthly prize of \$10 is awarded.

The Board of Governors of the Fellowship Club—all workmen—some time ago came to the conclusion that the plant needed a restaurant. They referred the matter to the company, and the Fellowship Restaurant was the result.

Since its establishment the restaurant has served 1200 meals a day. Quick service is given, and even when the noon-hour rush is at its greatest the men are seated and served in exactly six minutes. Music, occasionally by the employees' band, goes with all the meals.

Separate from, but adjoining, the restaurant is a lunchroom, where the same type of equipment as is in the main dining room has been installed. Here

the man who prefers to carry his own lunch is provided for, and on gas plates he may heat beverages.

In connection with the welfare work the Good Fellowship Club issues a periodical called *The Commonwealth*, which chronicles all the happenings of the plant. There aren't any prosy, "better-than-thou" editorials in *The Commonwealth*. But there are stories about the baseball club, the glee club, and intimate personal notes that show how deeply and earnestly the workers have entered into the latest phase of the relations between labor and capital.

United Shoe Machinery Company.—There is a great industrial organization in Beverly, Massachusetts, which apparently has solved the problem of just how to contribute generously to the welfare of the worker and yet leave to him his self-reliance. The organization is itself typically American, the outgrowth of American genius and constructive ability. It has a huge plant consisting of sixteen buildings, with a floor space of 924,000 square feet—over twenty-one acres. Within its buildings are marshalled, each day, over 4500 workers, the majority of them highly skilled, who turn out the most efficient and intricate machinery known to industry—machinery for making shoes. These workers grade high in the economic world.

When the United Shoe Machinery Company built this great factory it had in view not only the erection of an industrial plant, but also the creation of a healthful environment for the men and women in its employ. Instead of setting its factory in the midst of a thickly populated community, the company chose

a spot near the seashore, in a beautiful rolling country where in a tract of three hundred acres there would be ample opportunity for wholesome surroundings and the development of advanced ideas.

The officials of the company did not set out to establish a "model community," or to undertake anything which would be paternalistic or communistic in its nature. They felt that their employees, so far as possible, should own their own homes, and from the beginning they have stood ready to facilitate this object so far as they were able to without going into the real estate business or making heads of families feel that the retention of their homes might be affected in any way by their continuance in the company's employ.

Having given their factory such a setting, the company's officials determined to place in the way of its employees the social and economic advantages which the inhabitants of a well-ordered industrial community should enjoy.

They did not undertake to direct the pleasures or the thrift of those to whom they paid wages, but transferred to them the responsibility of working out their own destiny, exercising only such a supervisory care as might be deemed essential to orderly development.

The employees have a mutual relief association that does things. The fees are nominal, and graduated according to the earning capacity of the members, the largest fee being paid by the employee who earns twenty-one cents an hour or over, while the youngster making less than seven and one-half cents pays his

few cents each month, and is entitled to a substantial financial assistance in time of illness or other physical distress. The company, in order that the affairs of the association may be carefully and systematically administered, pays the salary of a secretary, who spends all of his time keeping the business side of the society in order.

In Massachusetts there are in force, according to the most recent report of the State savings-bank officials, 2521 savings-bank insurance policies, and of this number about one-sixth, or 402 policies, are held by the thrifty employees at this Beverly plant. The limit allowed to each policy under this form is \$500, and as the Beverly employees hold an aggregate of \$201,000, it is a simple process of arithmetic to show that the average is over \$490. This is not surprising when it is borne in mind that the United Shoe Machinery Company was almost the first in the United States to inaugurate this form of benefit, and that its advantages have been consistently impressed upon those for whom it is intended.

One of the best equipped hospital emergency plants in the country has been set up in one of the buildings, and whenever one of the employees is stricken, he or she is quickly carried to the emergency room, where prompt professional treatment is administered, and where everything is done for comfort and relief. If the injury or illness is of a minor nature, the victim is cared for in the little hospital, but if of a serious character the patient is taken to the Beverly hospital and cared for at the expense of the company.

Considering the number of employees and the great quantity of machinery used in the various operations, the casualties are infrequent. The corporation has spent great sums in preventive measures. The dangerous sections are guarded by covers, and powerful fans drive the dust from the grinding machines upward and away from the worker. The State inspectors have frequently congratulated the administrative force because of the measures taken to prevent injuries to employees, the equipment being much more complete and costly than the safeguards prescribed by the statute.

In an exhaustive article on Machine Shop Accidents, a writer in "American Machinist" made the following interesting comments on the conditions that he discovered on a visit to the Beverly factory:

The structural and equipment conditions are much better than the average of machine-shop conditions as they exist today throughout this country. Furthermore, the State of Massachusetts has done as much as, if not more than, any other State in the Union in passing laws regulating factory conditions. These laws cannot be looked upon from any other viewpoint than one of approval. Thus, the existing machine-shop conditions are among the best that can be found in this country today, both because of the buildings, the attitude of the management, and the carrying out of beneficent State laws. These conditions must have a tendency to reduce the number of accidents per unit number of employees, and may produce a ratio of the number of accidents per year to the number of employees that is somewhat less than a similar ratio from all of the machine shops of this country, provided the latter figures could be obtained.

In accordance with the firm policy of the corporation, i.e., not to meddle with the affairs of the employees, the club house—which cost thousands of dollars, and which is as complete in its appointments as any other country club house—was turned over to the United Shoe Machinery Athletic Association without any “strings attached.” This Association, which now includes more than 1100 members, has a rule to the effect that persons who do not work for the company may become members. The result is that the employees are able to share their recreation with the townspeople and their neighbors. But as a safeguard against indiscriminate selection, and to prevent non-employees from influencing the policy of the organization, a by-law provides that at no time shall more than 25 per cent of the total membership be outsiders.

The clubhouse faces directly upon an ideal stretch of land, which has been largely used for athletics, and which in the future will be given over even more fully to this form of recreation. Inside there are a theater and auditorium, a library, locker rooms, bowling alleys, and cosy little rooms for the women, who find them both comfortable and convenient.

There are various divisions of the athletic association. The gun club, composed of eighty members, has an excellent range for trap and target shooting. This is situated at a remote section of the grounds, for the sake of safety. The baseball division has a membership of thirty-five; the motor boat division comprises forty members; the soccer-football coterie claims twenty-five or more; and the cricket-team,

fifty. All the sports represented by this list have been participated in for several years past, but from now on they will be better centralized and regulated. Each of the various athletic divisions has its own offices, and can do about as it pleases, although the main association must pass upon the final action taken by any one of them.

There is also a band made up of employees of the company, which is in demand at all times partly because it plays very well indeed, and partly because the uniforms are natty. There is a chorus of excellent voices, which sometimes gives joint concerts with the band.

There are attractive little gardens, where fifty or more employees grow vegetables. The plowing, harrowing, and fertilizing are done by the Company, which also provides seed.

Best of all, there is provision for the future of the boys. For the instruction of the youngsters who will one day be the inventors and trained mechanics at this ideal plant, the company, in conjunction with the State of Massachusetts and the City of Beverly, has established what is said to be the first successful school for mechanics in the United States. Two groups, each containing thirty-five boys, alternate between the factory and the Beverly High School. The Company furnishes all materials and keeps the accounts. The boys are paid one half the price that would be paid to men performing the same tasks. The other half goes towards the expense of the school. The Company also makes up the yearly deficit between the earnings of the practice shop, as

shown by the accounts, and the cost of the shop's maintenance, which includes the salary of the instructor. Here is industrial education perfected. There is access to the regular classes and to the laboratories of the High School. The classes alternate, one week at the factory and one at the school. Within the factory the boys get factory discipline, just as the other employees do, and work the same hours. They usually like the work in the factory better than that in the school, because they build something useful. Moreover, when the expert approves the article they sell it to the company, and thus enjoy the gratification that comes from expert and profitable toil.

Filene Co-operative Association.—No organization has done more notable pioneering than the famous retail specialty store of William Filene's Sons Company of Boston. Although this is a department store rather than a manufactory, its labor problems are analogous, and an examination of the various activities of that concern will reward every executive. The store employs about three thousand persons. Here is the way in which the employees carry on store social activities through the agency of the Filene Co-operative Association:

The Filene Co-operative Association is an organization to which every regular employee of Wm. Filene's Sons Company belongs by virtue of employment. There are no dues imposed upon membership, but each feature of the work of the Association is planned to be self-supporting. Participation in the various features is optional with the members.

Its progress has more firmly established a true spirit of

willing co-operation among all employes and the corporation to the end that their general welfare might be conserved and their efficiency increased.

The purpose of the association is to prevent the enforcement by the management of unjust rules affecting the discipline and working conditions of employees; to prevent unjust discharges or removals of employees; to inaugurate when needed new rules affecting the discipline, work or conditions of work of employees; to conduct the social and so-called welfare activities of the store without the dictation, but with the co-operation of the management.

In general, its purpose is to enable all of the employees of the corporation to have a sufficient voice in the store government and administration to make it just, considerate and effective, and to develop a healthy atmosphere of real service to customers and to each other.

The way the employees may make their voice in the management heard is as follows:

If two-thirds of the members of the F. C. A. vote in mass meeting to change, initiate, or amend any rule that affects the discipline or working conditions of the employees of the store, such vote becomes at once operative.

Still further, if five-sixths of the members of the Council, the elected governing body of the F. C. A., vote in favor of such a rule in meeting, it goes into effect at the close of one week, unless meanwhile vetoed by the General Manager, President or Board of Managers of the Corporation, or a majority vote of the F. C. A. But even when it is vetoed by the management, a mass meeting may be held by the members of the F. C. A., and a two-thirds vote of the entire F. C. A. at such meeting will pass the rule over the veto.

Directors: The F. C. A. became a still more important factor in the business in 1912, for at that time it was for the first time represented on the Board of Directors of the corporation.

In this way the F. C. A. is constantly in touch with the direction of the business, and has a voice in the conduct of it. The representation on the board of directors was increased from two members, in 1912, to three members, in 1913, and was increased in 1914 to four out of a total of eleven directors. In few, if any, businesses in the world do the employees have a stronger voice.

Use of Power: How have the employees used their power? Has it been used by the employees as a club to force their employers into unfair concessions as they might well have done under the organization? Or has it been used in a judicial, fair-minded manner? Let us take an incident that happened in 1911. The question for vote was as to whether the store should be closed all day Saturday, June 18, the day preceding being Bunker Hill Day, a State holiday. If this were done it would give the employees a three-day holiday. A precedent for such a vote had been established some years before when they had voted to close the store on July 5 (a Saturday), July 4, the holiday, coming on Friday.

Agitation had been quite intense during the days preceding the meeting, for the employees naturally were interested in having an additional day's rest with pay; the meeting was to hear both sides of the question and to decide. After those in favor of closing had made their plea, those opposed brought out an argument few had considered, the fact that conditions were not analogous. It was pointed out that a Saturday in the middle of June was much more valuable and costly to lose than one in July, that it was the last Saturday before the bulk of the school graduations and that much more business would in all probability be lost. When the vote was taken, the employees voted by an overwhelming majority not to have the extra holiday.

Similar fair mindedness has at all times characterized the actions of the Association. Such power puts the employees

into a closer relation to the firm than would seem possible under any other plan. But the employees have never attempted to use this power in a way that would be disadvantageous to the firm, realizing that what is best for the firm is in the end best for them. This conception is one of the great benefits resulting from the Filene Co-operative Association.

Organization: The organization of the Filene Co-operative Association is shown in the accompanying chart.

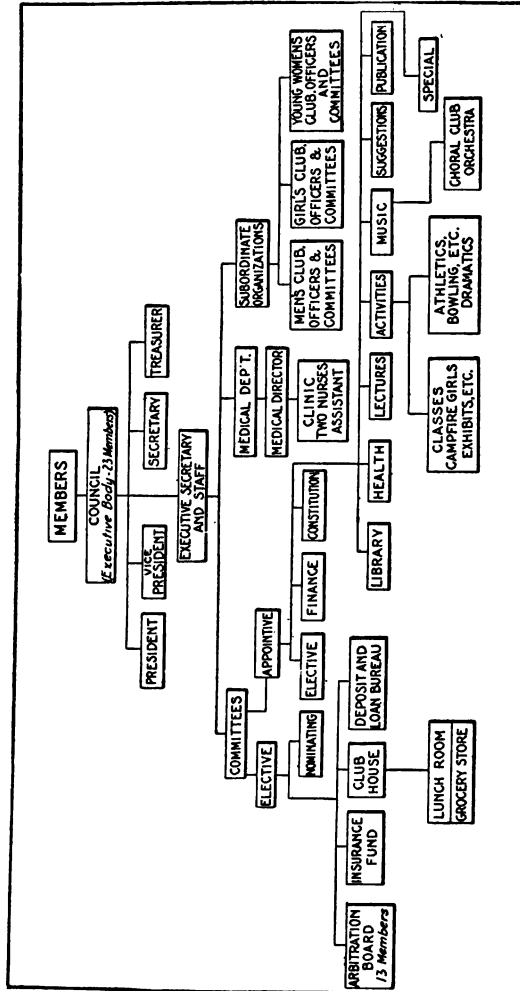
The Association now has for its sole use nearly 15,000 square feet on the eighth floor of the Filene store. All of this space is supplied to the co-operative association by the management free from rent, and is managed by the employees themselves.

It is the duty of the Activities Committee to arrange for all educational opportunities and amusements which do not come directly under the charge of the various clubs, and to schedule and arrange for the various activities of the F. C. A., in order that there may be no conflicts as to the use of the club rooms, and no two organizations may have meetings on the same night, if that will be to the detriment of one or the other.

This committee first took the field in the fall of 1913, and much credit belongs to it for the businesslike way in which it has handled its educational lines. These educational branches include classes in German, French, Millinery, Sewing, Modern Dancing, and Public Speaking. All of these activities have been self-supporting, each member paying a proportionate share of the expense. They have made it possible to get these advantages for less than the same course would have cost elsewhere.

In this connection it may be noted in passing that beside the F. C. A. educational classes the store itself conducts regular educational work through its educational department. This department meets the salespeople, stock people, and

LABOR AND COMPENSATION



ORGANIZATION CHART OF THE FILENE CO-OPERATIVE ASSOCIATION

markers in discussions on salesmanship and business management, and in addition, through a connection with the public Continuation School, conducts classes in retail salesmanship, textiles, and so on. The basis of that work is a clear statement of what the holder of each position requires in training and education to fit herself more fully for the position she holds, and to qualify her for promotion into the higher positions. For example, if it is believed that a person is fitted for a buyership, instead of allowing her to gather her knowledge as best she may, she will follow a carefully laid out course of training for this position. Another important feature of the new educational system is the attempt to train those higher up, the executives, that they in turn may properly instruct the people under them. This gives training in two quarters—from the executive down, and from the beginners up.

The amusement organizations and activities which are under the charge of this group are: the Women's Bowling League (the Men's Bowling League being a part of the Men's Club), theatre parties, opera parties, and the campfire group.

Arbitration Board: The following extracts from the F. C. A. Constitution show the place of arbitration in the new business:

“The purpose for which arbitration is established in the business is to insure justice in the administration of the work of the store.

“The scope of its activity shall include all cases in which any member of the F. C. A. has reason to question the justice of a decision by a superior or the action of an F. C. A. Committee or member.

“The duty of the Board shall be to see that justice prevails either by initiating an inquiry or by granting a hearing to any member of the F. C. A. It shall conduct an exhaustive examination of each case coming before it.

“The powers of the Arbitration Board are intended to extend to all cases of differences relating to

- (1) An employee and the management.
- (2) Two or more employees in matters of store interest.
- (3) The justice of a rule in question affecting an employee.”

The questions most frequently brought before the Board are of dismissals, changes in position or wage, transfers, location in the store, missing sales, shortages, lost packages, breakages, torn or lost garments, differences between employees, and payment for suggestions.

The decision of the Board is final for all cases arising within its jurisdiction; it may, however, reconsider a case upon request, if it so chooses.

In cases of dismissal or increase of pay, a two-thirds vote of the entire Board is needed, but in all other cases a majority vote of the entire Board decides the case, and, in cases of salary, deductions shall be an order for refund.

In minor cases, by majority vote of the whole Arbitration Board the Chairman may appoint a sub-committee of three members to act as an Arbitration Committee. Its action may be appealed from by either party to the Board for confirmation or further action by the Board.

Any executive may have in any controversy between him and the executive authority of the corporation in respect to his employment, arbitrated by a special arbitration committee—one member to be chosen by the executive, one by the corporation and the third by these two. Decisions given by a majority of these three arbitrators is final.

The Arbitration Board consists of twelve members elected one from each section of the store, and a Chairman appointed from the Council by the President. The member of the Board elected from each section of the store shall be the counselor

or advisor of that section. Duties of the Section Counselor are:

- (a) To advise the employees of his section on questions arising in the conduct of their work.
- (b) To distribute information as to the Arbitration Board among the people of his section.
- (c) To instruct an appellant in the detail of presenting his case before the Board.

The findings of this Board are confidential. It is of interest, however, in viewing its work to note that through the years, the cases seem to average about half in favor of the firm, and half in favor of the appellant.

Insurance Committee: To the Insurance Committee belongs the honor of being the nucleus of the F. C. A. At the time it started (1898) there were about one hundred employees. The Messrs. Filene, having in mind the losses to employees in both time and money, through illness, at that time suggested a Mutual Insurance Association. The suggestion was accepted by the employees, and nearly all became members. The original plan called for an initiation fee of 25 cents and dues of 5 cents weekly; the sick benefits were \$5 a week for not over 4 weeks in any year, and there was a death benefit of \$50.

The insurance organization was not self-supporting on this basis, and consequently, in the fall of 1906, the question was taken up by the Council and a sliding scale was adopted. This scale was again readjusted in the fall of 1911 and now reads as follows:

Scale	Benefit in case of illness
Dues—25c per month.....	\$4 per week
30c “ 	5 “
35c “ 	6 “
50c “ 	8 “

Dues—60c per month.....	\$10 per week
Death Benefit.....	50

Medical Department: Simultaneously with the birth of the Insurance Committee came the desire to prevent illness so far as possible. Ways and means were considered, and arrangements made to have a medical advisor come to the store one hour a week, with whom members could consult, and thereby know in time what steps to take to prevent disease and breakdown.

The important point for consideration in connection with this medical department was that employees might hesitate to go to a physician appointed and paid by the management for fear that illness or poor health might be reported to the firm and affect their employment. It was arranged that the medical staff should be hired and controlled entirely by the employees themselves. The employees have, therefore, had entire confidence in the work of the clinic and have made use of it freely. The result has been of great benefit to the employees and to the firm as well.

Suggestion Committee: To encourage thought, and to interest employees in the policies and activities of the store and of the F. C. A., prizes for accepted suggestions for improvements in the business are paid, according to a schedule arranged by the Store management. These prizes are awarded by a Suggestion Committee, appointed by the President of the F. C. A. They may make their awards on the recommendation of the executive whose work the suggestion affects, but they have the power of awarding prizes without the approval of the person affected by the suggestion.

Council: In 1905 it was found impractical, because of the greatly increased number of employees, to transact business through mass meetings consisting of all the employees. Consequently in this year the F. C. A. Council—the legislative body of the Association—was formed, the members being

the elected officers of the Association and elected representatives. Originally there was one representative for every fifty employees. At present the Council consists of one member from each of twelve sections of the store, nine members elected at large, and the officers.

All of the business of the Association is transacted at the bi-weekly meetings of the Council and then reported back to the employees through the *Echo*, (the F. C. A organ) or by written notice. Only rarely is it necessary or desirable to use the referendum. It was made use of in 1913, for instance, when the question as to how the funds of subsidiary organizations should be handled was up for discussion.

Executive Secretary: In 1900 the firm created the Welfare Manager's Office. In the beginning, the welfare manager engaged and discharged employees of the store, was educational director, acted as intermediary between the Firm and the people, or between one person and another, and was executive secretary to the Filene Co-operative Association.

In 1907 this office was changed and the F. C. A. now has an Executive Secretary, who is its executive and administrative head, paid by the store, appointed by the President of the F. C. A., and confirmed by five-sixths vote of the entire Council. The Secretary acts as a confidential advisor to any employee upon any matter affecting her or his personal interest in the store or as a member of the F. C. A. He also acts as an intermediary between the Corporation and the people or between one person and another, and decides what is fair and just. His decision is an acknowledged factor before the Store Management in the final adjustment of a matter on appeal. He is the recognized representative of the F. C. A., and of employees' interests before the Store Management and the Corporation.

Bank: The F. C. A. Bank was established in 1900. In a very short time deposits grew so large that in order to safe-

guard them the firm, with the consent of the people, took charge of these funds, agreeing to pay 5 per cent on all sums deposited with them. The deposits draw interest monthly; interest is added semi-annually. On December 31, 1913, the bank deposits totaled \$71,800, distributed among 1619 employees—76.6 per cent of the employees in the store—an average deposit of \$44.36.

The Loan Department of the Bank was introduced by the Board of Finance in the fall of 1905. This was done to meet a definite need for it had frequently happened that some of our people had been obliged at times to borrow at loan offices small sums of money for urgent needs, and compelled to pay exorbitant rates of interest. Loans are made to employees on the approval of the Bank Officers, or of two of the Directors. On December 31, 1913, 342, amounting to \$7,934.50 were outstanding, the average amount of each loan being \$23.20. Loans for more than a person's weekly salary are made only on good security. The maximum charge for loans to employees is one per cent a month.

Club House: The first Club House opened on April 8, 1901. It afforded a place for lunches, with conveniences for preparing food, and social gathering lectures, musicales and whist parties.

At the present time the Dining Room is one of the larger departments of F. C. A. work, and is patronized every day by about twelve hundred people, the average lunch check being 13 cents. In addition, the Lunch Room serves, each day, breakfasts and suppers. It also furnishes dinner for the numerous evening meetings, and caters to parties, dances, and outings of store people.

For the past few years, the F. C. A. Club House Committee has made substantial savings for employees by establishing co-operative buying. For instance for the past few years it has bought Thanksgiving and Christmas turkeys; it has es-

tablished co-operative coal-buying and co-operative supply-buying by procuring and selling household necessities at practically wholesale prices. At the present time, the Co-operative Grocery store does an average business of \$25 a day in groceries, and \$10 a day in candy. Meats are sold on immediate order. Its being associated with employees' restaurant has helped considerably—an important factor where perishable goods are to be considered.

Athletics: In 1904 the Silver League Cup was won by the F. C. A. Base Ball Club. This was the start of store athletics. Baseball, track athletics, bowling, swimming, hockey, skating, and other athletics have since been carried on in the F. C. A.—as a rule, under the guidance of special committees. In the season 1913-14, for instance, the association was represented by one of the best relay teams in Boston and has been engaged in several competitive meets with amateur athletic organizations. The spirit of pure amateurism has always been the only standard, and early the Association took a decided stand against the practice of placing athletes on the payroll in order that they might play on various teams.

Music Committee: The Music committee is appointed to furnish musicales, arrange for a Choral Society, and plan entertainments.

A notable outgrowth of the music committee is the Filene Choral Club, first organized in 1910. The first Choral Concert was given in the store; several followed in the larger Boston halls, and in later years very ambitious concerts, followed by dancing were the rule. But aside from the concerts, the Choral Club has done noteworthy work in providing musical training for those who wished to benefit by it. For the past two years, the growth has been steady, and the Club promises to be one of the best-known and best-liked members of the F. C. A. family.

Profit Sharing: In substance the plan is that all net profits remaining after the payment of dividends on the preferred and on the common stock, which represents a reasonable amount, paid by the new corporation formed upon entering into the new store for the assets of the former business, together with additional capital invested, and also such sums as are necessary to retire stock, etc., are divided among the employees. The distribution is one half to the members of the Management and one half to the remaining employees. This later one half is divided among the employees in proportion to their salaries. In order to reward specially meritorious service, a Board of Apportionment is to be appointed annually (consisting of three members selected by the Filene Co-operation Association, three selected by the Directors of the corporation, and a seventh selected by these six), which shall have power to award to persons who have performed such service suitable sums, these sums being deducted from the half paid to employees other than the Management before the distribution is made on the basis of salaries. The plan also provides that awards out of net profits may be made to the F. C. A. before anything is distributed, if the Directors of the business so decide.

Bonuses: In addition to the profit-sharing, provision has been made for special remuneration for increased efficiency, to be deducted before net profits are figured, in due proportion to individual results accomplished. This is in the form of payments in addition to the fixed wage, consisting of bonuses to department executives, extra commissions to salespeople, and so on, for the achievement of especially excellent results in the individual departments. There is some likelihood that this bonus idea may be still more largely applied, the basic idea being that it will increase efficiency in the department, and thus increase the amount of net profit to be distributed to profit-sharers.

Employment Managers' Associations.—One of the most hopeful expressions of the new viewpoint in management, and of the increasing emphasis modern executives now lay upon the matter of management, is to be found in the spread of associations of employment officials connected with the large industries of the country.

This movement is of such vital importance to every employer that a number of similar associations have been formed in various other industrial centers since the first—the Boston Employment Managers' Association—was started.

During 1911, the Vocation Bureau of Boston invited fifty men, who had charge of the hiring of employees in large shops and stores of the city and vicinity, to come together and consider the advisability of meeting regularly. As a result, the Employment Managers' Association was started.

The aims of this Association are described as follows in the constitution:

To discuss problems of employees; their training and their efficiency.

To compare experiences which shall throw light on the failures and successes in conducting the employment department.

To hear the experience of experts, or other persons who have knowledge of the best methods or experiments for ascertaining the qualifications of employees, and providing for their advancement.

It will be seen that the aim of this association, as well as of the others, organized in following years, was to provide a professional medium for the ex-

change of experiences in a field where little interchange of ideas had taken place; to study the human problem in industry on the basis of fair dealing with respect to the employee. In short, there was a conscious effort to make industrial practice square with the dictates of twentieth-century enlightenment.

Activities of the Associations.—The problems in which the associations are interested are divided roughly into four groups, as follows: Selection of Employees, Training, Management, Special Work among Employees. In general, a committee is appointed to consider the phases of each division. Each committee arranges to meet once a month to discuss the different topics in the main division assigned to it. These meetings take the form of round-table discussions, and are open to any member who wishes to attend. From time to time, reports are submitted to the regular monthly meetings of the associations for fuller discussions. The following outline gives an idea of the topics taken up by the various associations:

Selection of Employees:

Sources of Supply; Methods of Securing Applicants; Examinations (general, mental, physical, for special positions); Standard Application Blanks; Investigation of Credentials; Relative Value of Qualifications; Choosing between Applicants; Selection of Young or Inexperienced for Training and Promotion; Value of Immigrant Labor; Value of Previous Training and Education; Necessity of Planning for Future in Choosing Employees; Keeping Track of Former Employees; Waiting List; Co-operation with Foreman, Superintendent, and Heads of Departments.

Training Employees:

Necessity of Immediate Preliminary Instruction; Instruction in Shop; Special Classes; Company Schools; Outside Education; Part-Time Schools; Continuation of Night Schools; Technical Schools; Need of these in each Industrial and Business Community; Correspondence Schools; Training for Promotion; Co-operation with School Authorities, to Secure Proper Preliminary Training; Defects in Present Educational Methods from Employers' Standpoint; Vocational Training, its Value to Employers; Danger to Employees' Health in outside Educational Work.

Management:

Advantage of Proper Surroundings and Conditions; Hygiene; Morale; Securing and Retaining Interest; Enthusiasm and Loyalty; Shop Rules; Piece-Work; Accident-Prevention; Advantages of Employees' Organization; Transfer from One Department to Another; Promotion; Weeding out Undesirable and Inefficient; Cost of Breaking in New Employees; Eliminating Turnover; Cost of Shut-Down; Discharge.

Special Work among Employees:

Health; Recreation; Rest Rooms; Thrift; Insurance; Pensions; Credit-Unions; Bonus Systems; Profit-Sharing; General Advice; Living Conditions; Social Life; Vocational Aid and Advice; Help in Securing a Better or more Suitable Position.

An Expert's Opinion.—Mr. James P. Munroe, President of the Munroe Felt and Paper Company, has been in the forefront of experimentation among manufacturers who realize that the personnel problems of an organization are equal in importance to

any other which come up for decision. This is what Mr. Munroe says on the subject:

We are getting back to the old idea in business—the idea that prevailed when the business was small enough for the manager to know it through and through, and to know every man employed in that business. That, we said, was old-fashioned; but we find that it is absolutely essential, and that our business, no matter how big it is, how many tens and hundreds of thousands it may employ, must be made up of small units, in which there is some individual who knows his unit, who is responsible for his unit, who co-operates with his unit, just as the “old man” used to in the primitive days when he carried the whole business under his hat.

Having arrived at this same state of mind in regard to business, we at once see that the employment manager, instead of being somebody who gives part of his time for more important work, or a man that we get in because somebody recommends him, is really the key to the success of modern business. For it is he who controls this question of the human element. It is he who has to keep your business supplied with men, from the very lowest up to a pretty high degree. It is he who has to carry out a system of promotion, of discharge, of changing from one section of the business to the other, so that the whole thing will be a thoroughly team-work proposition.

He has, furthermore, to be such a student of the whole problem of employment and of the business in particular, that he will not waste time and money by bringing in a continual stream of people that never ought to have been allowed to come in there at all, people that have to be trained at great expense and then have to be thrown out, because they are no good.

Consequently, as I have said, we see that the question of employing, and of the employment manager's department, is

the key to the whole proposition. We realize, furthermore, that the employment department has two distinct problems with which to deal. It has first, to deal with a small body of ambitious individuals with brains, from whom it has to develop and select the necessary foremen, overseers, superintendents, and heads of these small groups to which I have referred. It has, furthermore, the much more difficult problem of the comparatively large body of what you may call "lumpers"—of persons who have nothing in view but the pay envelope at the end of the week, and in whom it is very difficult to put any other idea.

The main problems, as I see them, are these: first, to find your good material to bring into the business; second, to give it a chance to make the most of itself; third—and that, in these days, is a mighty serious proposition—to keep it after you have trained it. We find in our part of the country that we spend our good money and our good time in training men, and then the munitions people, or some others, come along and carry them off in the night, and they don't even return for their pay envelopes.

The second problem of the Employment Department is to get just as many persons as possible out of what I have called the "lumper" class—the unambitious class, the class that never looks beyond anything but the pay envelope—of getting them out of that class, and lifting them up into the brainy class, the class on which we depend for the overseers and managers.

And, thirdly, the Employment Department must deal with the remaining "lumpers," who cannot be gotten out of their dullness, in such a way as to inspire them with some conception of loyalty. For the whole heart and soul of any organization, be it large or be it small, is loyalty, is the feeling of everybody, from the bottom to the top in that business, that it is the only thing worth working for, that they are

there to work for it, and that they are going to work for it, heart and soul, just as the football boys in the Harvard Stadium work for success in a football game. Of course, that involves all this tremendous question of national loyalty and of the Americanization of these employees, of filling them with some faint notion, at least, of what it is to be loyal to their country and, as a parallel thing, to be loyal to the business in which they are employed.

This whole employment process is, in the last analysis, a process of education. It must be carried on in the educational spirit, but in the light, all the time, of the needs of the business. That is, it has to be carried on from the business end, by men who know what the needs and demands of that business are.

Therefore, it seems to me that the Employment Managers must work together to determine what are the fundamental things they need in business, and then must teach the schools how to provide those fundamental things. And all of them—employment managers, business men, and schools—must carry on business and preparation for industry, not in any sentimental way, not in any haphazard way, but according to the sound principles of pure and applied science. Business itself, manufacturing, industry in general, all must be handled as a science; and all this tremendous problem of employment, which is the heart and soul of business, must also be handled as a science, and as one of the greatest problems in the whole scientific field.

Permanence of the Science.—The interest shown by successful and responsible executives throughout the country abundantly proves that the management of men and the subject of industrial relations are no theoretical matters. The marvelous growth of associations of employing officials only goes to prove the

same thing. A new science and a new art of handling men are in process of construction. A new interest in the human elements that underlie every industrial organization, has captured the imagination and the conscience of every man of vision and power.

CHAPTER III

THE EMPLOYMENT DEPARTMENT

Importance of Employment, or Personnel, Department.—The employment department, or, to use the more descriptive title, the personnel department, determines just what kind of organization there is to be. Unfortunately this important fact is oftentimes overlooked in the scheme of management. Since employees are essential to an industry, there is no escaping the fact that the manner in which they are recruited and dealt with absolutely fixes the quality of the organization. And what is more, the very quality and quantity of the output, whatever this may be, is also determined by the quality of the employment department's work.

I am assuming, of course, the existence of an employment department. If there is only a poorly paid subordinate, a hiring clerk who has no power or real responsibility, and whose sole duty is to answer requisitions for labor as it may be needed, the first essential to a sound and growing organization is missing. Such a clerk may be as capable as any other man in the employment field, yet no mere employment agent can possibly give an organization the assistance it needs in order to come up to the standard of a modern enterprise. Fortunately in-

dustry is abandoning this antiquated conception of the one-man employment department. No big plant can afford to put up with weakness in that department. No employer can today afford to relegate the problems of the working force to any minor office or official.

Employment, and all work associated with it, is one of the major functions of an organization. It is as important an activity as production, control of expense, and selling. The organization that acts in appreciation of this fact goes forward; the organization that does not, stands to lose its hold and go backward. So I have termed personnel work the heart of organization. The bigger and more effective such work is, the better the organization, for, instead of being a mere incident in management, the handling of the labor force is one of the few really big jobs with which management has to deal.

Former Employment Methods.—In the simpler days of the past, a workman would apply at the gate for a job. If there was a job, and the man looked likely, a clerk would give him a card, send him to a foreman—and forget him. The man might, or might not, remain in the plant a week. What happened to him, what the foreman did, was nobody's business. There were plenty of other applicants at the gate. Some foremen seemed to have vacancies in their departments all the time, others seldom called for help; in any event no record of any kind was kept of these matters. If men quit—why, they were dissatisfied; if they were allowed to go, they must have been incompetent. That the organization itself should be placed

on trial in regard to the matter, no one suspected. That the loss of men from an organization was bound in time either to impair it, or—something just as serious—make impossible any constructive and helpful relation between management and men, dawned on but few managers. The labor market was flush, the rank and file were as yet untouched by the modern mass movements which are at present so radically altering the attitude of workers, the relations between workers and their work sadly lacked inspiration, and management, as a whole, was thinking exclusively about the more material and mechanical problems of organization—naturally, then, there was nothing to compel a square facing of the human problems in industrial organization.

Employment Problems Today.—Changed conditions confront the executive today, and there is no prospect of any return to the past. Whether or not the labor supply may be as plentiful as formerly, the situation henceforward will demand that careful and intelligent thought be given the subject of the relationship between management and men. In the first place, men will keep away, except under the pressure of need, from a concern which has not learned that labor stability is one of the first of all provisions that a modern organization must make in order to be regarded as a good firm to work for. Secondly, no organization can afford to allow leakage and waste in connection with the working force, since to do so is not only costly, but, from an organization standpoint, suicidal.

Modern industry has entered upon many activities

unknown a generation ago, both in order to express its good will toward employees, and in order to make the work as attractive as possible. What is known as welfare, or social service, work is a familiar activity everywhere. At one time it was regarded as a kind of benevolence or philanthropy on the part of the employer. We know today that it is justified, on the grounds of good business practice, just as are safety work, good lighting, avoidance of overworking or under-paying men and women, the furnishing of adequate housing facilities for employees, and general protection of the workers' standards of living. This attitude involves no belittling of welfare work or of the employer's sentiments. Rather it means an enhancing of the value of all such work, provided that work is placed in its proper setting and stripped of sentimentality and mixed motives. But service work, invaluable though it be, can never make up for weakness in the personnel plan.

Good organization requires a thoroughgoing employment plan, of which social-service work is a part. Such an employment plan implies careful selection of the worker, from an organized labor supply, provision for his development and promotion, and supervision and personal contact with the worker throughout the period of his employment.

Personal Contact.—It is very easy to use the phrase, "personal contact," but it is extremely difficult to secure what it stands for. In a small establishment, the owner may know by name every man who works for him. Such intimacy is impossible in present-day big establishments, and the very weak-

ness of modern industry lies in the "anonymousness" of the worker. Individuals are lost in the mass—they become numbers, or tickets, or checks. This situation is full of danger, for men, far from being tickets or checks, are alive in a thousand ways, even if the scheme of organization may be based on the assumption that they are automatons, hands, producing units.

If the plan of work does not permit of the employees' expressing themselves in some way, if there is no outlet for their manifold desires, ambitions, and interests in connection with the organization they work for, they are inevitably bound to find such means outside, and use the means whether or not the use of them runs counter to the principles of the organization. In other words, work is not the chief end of the worker, but a means to the end, which is to live as full a life as he may. All that the employer has in view as a goal for himself and his children, the worker has in view in equal measure, and with equal intensity. Either employer and employee grow together and unite to achieve, to gain the common ends of life, or they become separated by an ever widening abyss.

Functionalized and Centralized Department.—The twentieth century is teaching all men how to live. The very dullest catch, from the spirit of the times, a vision of a satisfying life. If men cannot find in their work a source of satisfaction, they will seek it outside, and, if need be, by ways and means harmful to the work. An employer can buy time and effort—he cannot buy loyalty, enthusiasm, interest, and good

will. These things he must learn to deserve, and if he deserves them, he will get them in abundant measure, to the great benefit of his organization.

Now an employment or personnel department specializes in the activities which build up good will, that potent and indispensable source of all real efficiency. Every large manufacturing plant invites all kinds of labor, in varying proportions. There are many departments, each of which may, in the course of time, have developed methods, customs, and traditions of their own in dealing with the human problems in management. Some of these methods are good, others are sure to cause evil results. Unfortunately men who are born employment executives are sometimes found in the position of department heads, where they deal with questions far removed from that of perfecting a centralized employment department. It is a pity to lose whatever help any officer can give to the building up of a personnel organization. It is also dangerous to permit the personality of any individual officer to interfere with the harmony between the organization and the working force, or, on the other hand, to be the single point of contact between them.

Many plants therefore have started the so-called functionalized and centralized employment department. Its purpose is not to check the human interest which any executive or group of executives may have, but rather to enable such interest to flow in a steady, dependable, and beneficial stream.

Curtis Publishing Company's Plan.—A good conception of such personnel departments is to be found

in the plan formulated for the Curtis Publishing Company, by President E. M. Hopkins, of Dartmouth College, when he was employment manager with that company. Miss Katherine Huey, who assisted, has outlined the details of the plan as follows:

Every department of the plant must be analyzed and charted as to its individual positions, duties, pay, and possibilities. The analysis should cover such points as

- (a) Nature of the work,
- (b) Specific importance,
- (c) Working conditions (involving physical or nervous strain),
- (d) Range of wages,
- (e) Hours,
- (f) Permanency,
- (g) Age limits,
- (h) Sources of supply,
- (i) Educational and personal requirements,
- (j) Necessary experience,
- (k) Opportunity for promotion.

Without such a chart before him, the employment manager will be acting in the dark. Long before vacancies occur, each position is studied as if an applicant were waiting to fill one. This is certainly job-preparedness on the part of an employment department.

Functions of Employment Department.—In addition to the actual job requirements, the personality of each department head is also quietly noted, his likes and dislikes, his idiosyncrasies, prejudices, and department standards. The more fully a department head can be persuaded to specify the requirements

for positions under him—with microscopic detail if possible—the better the results.

The Curtis Publishing Company's employment department maintains an extensive prospect file, 'as well as a list of possible sources of supply from which employees might be secured. As is the case in many another plant today, this department kept in close touch with schools and colleges; they took pains to ascertain what work these institutions expected their graduates would take up, and the department, in return kept the schools and colleges informed as to just what the company had to offer. Miss Huey's description of the employment office and of the nature of its work deserves quotation:

Location.—"The employment office should be located on the ground floor and equipped with both a house entrance and a street exit. It should comprise a large waiting room, a detail office, and a separate office for personal interviews.

Service.—"The clerks and assistants in the employment office should be not only possessed of poise, presence of mind, cheerfulness of disposition, discretion, and abundance of tact, but they should be imbued with a sense of loyalty to the company as a whole and a realization of the fact that their department is primarily one of service.

"As in the case of employees in any service department, the nerve strain on the personnel of the employment department is frequently excessive, owing to the fact that all demands, even if unreasonable, must be met with the greatest cheerfulness. It is important, therefore, that the personal relation be-

tween the employment manager and his staff should be pleasant and informal, and that his assistants should be encouraged to bring their problems to him at all times. This not only acts as an outlet for the employee, but has the added effect of bringing to the employment manager's attention many conditions in his own and other departments that need readjusting.

"With convenient quarters, and intelligent and sympathetic assistance, the daily interviews of applicants can be handled efficiently and in order.

Unexpected Demands for Labor.—"In times of sudden pressure of new work, when the supply of available names on file will not meet the demand, recourse must be made to open advertisement, from the applicants to which a more hasty selection is of necessity made. There is only one redeeming feature to open advertisement, and that is the rapidity with which temporary workers may be secured.

Filling Requisitions for Help.—"Where the function of the employment office is not to employ, but to recommend candidates for positions, applicants fitted for the position in accordance with the company's standard, who, in addition, suit the personal requirements of the manager, should alone be recommended.

"When vacancies occur, the classified files must be consulted and the most suitable applicants summoned. In cases of skilled office workers, such as stenographers, typists, estimators, addressers, comptometer and multigraph operators, tests should be given for speed and accuracy, and the standardization division (if there is one) should furnish the re-

quirements for these tests. Recommendations or references from outside sources do not prove infallible, but should in all cases be investigated.

Knowledge of the Labor Market.—"The number of applicants sent for must exceed the number of positions vacant, in proportion to the supply of the labor market. To use the case of the young boy in Pennsylvania, should a request be received for two sixteen-year-old boys, seven or eight of the most desirable applicants on the file would not be too many to send for, as the chances are that 50 per cent will already be satisfactorily employed. If the request, on the other hand, be for two boys under sixteen, on account of the present lack of demand three boys would be enough to summon.

Outlining the Position.—"Before any applicant for a prospective position is recommended, he must be told what the general nature of his work will be and given exact information regarding working hours, salary, and the possibility of advancement. He should be encouraged to ask questions about the work, and should not be recommended if he shows the slightest hesitancy in complying with the conditions.

"With every applicant recommended for a position, there should be sent a card which demands either the acceptance of the applicant or a complete explanation as to why he is not satisfactory.

The following form has been found expedient:

Mr. Jones, (Manager of Business Office.)

Harry Smith has been interviewed and is recommended to you for the position of *Errand Boy*.

After you have interviewed this applicant, please ask him to return at once to this office.

When applicant is accepted by you, an immediate medical examination will be arranged. Please state here when you wish applicant to report for work.

.....
In case of rejection, you will greatly assist this Division in intelligently referring applicants to you, by explaining below in what way he has not satisfied your requirements.
.....
.....
.....

“After the applicant is engaged by his new manager, he is examined by the company’s physician. The physician, on passing the prospective employee, sends him with his certificate to the employment manager, who after giving him an introductory note to his foreman, should embrace the opportunity to congratulate him on having obtained the position, and explain to him that the function of the employment department is not merely to employ, but to assist all employees to maintain satisfactory employment, and, to that end, it is always ready to consult with employees at any time. A cordial invitation to report on his progress should be extended.

Reports.—“All cards of recommendation should be filed according to departments and monthly reports made of the number of candidates accepted and rejected. The reasons for rejections not only serve as a guide to the employment manager for future recommendations, but also give him definite data on which to work when the rejections from any one department become either frequent or whimsical.”

Personnel Work.—The explanation by Ernest M. Hopkins, President of Dartmouth College, of the nature and function of an employment, or functionalized personnel, department is one of the most satisfactory statements ever made on this subject. He says:

“The impressive thing is not that some men recognize the importance of the individual worker, for this has always been true of some; it is that such recognition is so rapidly becoming general, since it has been so long delayed. Yet the causes are obvious. Power can be produced for A and Z with little variation in cost to either. Plant design has been standardized until one can gain small advantage over another herein. The same mechanical equipment can be secured by one as by the other. There is no longer marked advantage possible to the thoroughly progressive house over another, equally progressive and intelligent, in the securing of raw materials, in the mechanical processes of manufacture, or in the methods of promotion and distribution. Wherein lies possible advantage of A over Z in the competition between them? Or the question may read for Z, how may he retain his prosperity in competition with A? This is one phase of the compelling logic which is leading to the study of problems of employment.

“It becomes increasingly evident that the statement frequently made is universally true, if interpreted broadly, that the interests of employer and employee are inextricably bound together.

“The social significance of questions relating to the mutual interests of employers and employees is so

great that these could not have been much longer kept subordinate under any circumstances; but the utilitarian advantage to employers, individually and collectively, of scientific study of these problems has become so plain that the present general interest in them among industrial leaders can most positively be ascribed to the fact that, whatever else they are, they are a vital concern of good business.

Efficiency Defined.—"It was logical, when industrial management reached the stage that its practices could be defined, and the preliminary studies made to separate the good and the bad, in course of reducing such management to a science, that attention should have been focused first on processes, machines, and buildings. These things needed to be right before the worker could realize his possibilities. It is to be recognized, however, that though the word 'efficiency' came into wide use during this stage of dealing with inanimate factors, the word is entitled to the far broader significance, which carries an import of all-around effectiveness. Industrial efficiency, under proper definition, does mean and must be understood to mean, right workers and right conditions for them, as distinctly as right machines and conditions designed for their best operation.

"This is the broad principle on which the functionalized employment department has been established. It is simply the application of the same reasoning to finding and maintaining the labor supply that has already been applied in industry to problems of building, equipment, mechanical supervision, and the methods by which business is dispatched.

Functionalized Employment.—There is this greater difficulty in establishing a functionalized department for employment and correlated responsibilities than in establishing a department for almost anything else, that however frankly men will acknowledge limitations on some sides, few will admit or believe that they are not particularly perspicacious in their judgments of men. This is particularly true of those of circumscribed vision, whose advantages have been few, and whose opportunities for developing breadth in their mental processes have been limited, as is the case with many minor executives or sub-foremen. Such a one feels, perhaps not unnaturally, that his prestige with the new employee is impaired if employment is secured through some department outside his own. Moreover, he is likely to ascribe to the employment department no other basis of appraisal than he himself has used, and with this as a premise, he argues that his own intuition is better than that of one who lacks his own intimate knowledge of the work for which he is responsible. Almost invariably, too, he fails to value to reasonable extent the loss to his own work which comes from the waste of time involved in interviewing and employing, even if he undertakes to do this with such care as that of which he may be capable.

“Too much emphasis may not be placed, however, on the difficulties incident to establishing the employment department, for the foremost concerns have so definitely accepted the principle that it is bound to be accepted generally. It should simply be recognized that such a department cannot fulfil its func-

tion to become a large contributor to the success of the business unless it be given recognition and endorsement sufficient to gain for it co-operation from the departments with whose problems of personnel it must be in contact. A large responsibility rests upon the employment department to work carefully and considerately, with open mind and appreciation of the problems of others; but even so, occasional support in the way of instructions from above will be needed to give the department access to some parts of the field wherein its work should be done.

“This raises the question as to the place of the department in the organization. There can be only one answer, if the installation of the work is made in good faith—it must be in direct contact with the topmost management, where its problems can be passed upon promptly and decisively by ultimate authority, if issues arise. More important than this, the creation and establishment of such a department in a business should mean that the avenues of communication between those in the ranks and those at the top, which too often have become closed as a business has grown large, are to be reopened. If this does not become true, the potentiality for good in such work can never be more than partially realized.

“It is a duty that distinctly belongs to the employment office, to cultivate sympathetic knowledge of the opinions of workers, and to bespeak these to the management. All industry is so set up that the word of the management can be quickly and easily transmitted down. It is no less of consequence to

those above than to those below that some agency exist for facilitating the reverse process. . . .

Labor Turnover.—"Probably no greater argument for the establishment of a functionalized employment department in many companies could be made, than to induce a study of the labor turnover figures. It is not an unusual experience to find employers who estimate the figures of their own concerns at less than 50 per cent, when they actually run to several times that figure.

"It is to be noted that such figures, though illuminating in themselves, need further analysis, to be of major use. For instance, seasonal demands may be such in the specified shop normally enrolling a thousand hands, that tow hundred must be employed periodically for a few weeks and then dismissed, their places again to be filled in a few more weeks. If this happens five times a year, the turnover figures will be 100 per cent. The other extreme would be a concern with such lack of knowledge of the money loss involved in change that practically every job was vacated and filled at least annually, when likewise the labor turnover would be 100 per cent. Such figures are much too high, but they are not infrequent. They likewise are expensive, but while, in the latter case, the concern in question would bear much of the expense, in the former it is more largely imposed upon the community. Working men or working women who, through no fault of their own, are deprived successively, time on time, of the opportunities to realize their earning capacities, inevitably suffer impairment of courage, self-respect, and even

moral fiber, the loss of which falls first upon the community, but eventually upon industry, in the depreciation in quality and spirit of the labor supply. . . .

“The functionalized employment department is dependent, for successful accomplishment in particularly specific ways upon the smoothness with which its work can be made to articulate with other functionalized departments, such, for instance, as the accounting department, the schedule, or routing, department, and other like ones. It must rely on these for the data to prove much of its own work, and, in turn, it may find within its perspective facts highly important to them. Through the large number of its interviews, it should come to have an unusually comprehensive knowledge of current rates of wages for established grades of work. It ought, furthermore, to come into position to know to what extent the law of increasing returns will apply to additional rates of pay established to secure superior ability. . . .

“Of course, no effort must be spared to have the ways devised by which the best possible candidates shall be offered and chosen for the respective kinds of work. But the work is incomplete if it stops here. The good of the business is the criterion by which all accomplishment must be judged. If a high grade of labor has been secured, the company's interests demand that the environment, the conditions and the opportunities shall be made such as to hold it. The employment department cannot omit any legitimate effort to influence policies to this end. It must work helpfully and understandingly with other depart-

ments, without pride or arrogance. But it must work unceasingly, with clear vision, toward the goal of making its distinct contribution to the company's prosperity through the improved human relationships which it may help to develop."

Dennison Manufacturing Company's Plan.—The Dennison Manufacturing Company has developed one of the best known employment departments in the country. There are some points of interest in the plan which I consider of value as giving in detail the company's version of the department and its work. I therefore quote the major part of the plan here in order that the reader may himself judge its thoroughness and efficiency.

"The employment department of the Dennison Manufacturing Company was expected to improve the human relationships, and to reduce the labor turnover of the industry (a) by making a careful study of the requirements of its various occupations; (b) by engaging persons who could best meet those requirements and see that they were adequately instructed; (c) by transferring to other occupations any promising employees who were unadapted to the first job; and (d) by heedfully noting the reasons given by employees for quitting, so that steps could be taken to eradicate any common cause that was making employees dissatisfied with their work and causing them to leave.

"Although studies of other phases of employment work were of assistance, it was mainly through the careful study given to the foregoing divisions of placement work that the employment department was

able, in a large degree, to accomplish the expected results.

"In the Dennison factory about 10 per cent of the force of 2220 employees are engaged in the so-called skilled trades. This small group represents machinists, electricians, carpenters, compositors, electrotypers, and pressmen. The balance of the force represents those who were unskilled when they were engaged. Many employees in this group, however, are on jobs which require just as long an apprenticeship, and whose requirements are just as exacting, as the "skilled" trades. Of this larger group, about 60 per cent are females and 40 per cent males, and those in this group follow some 150 different occupations, many of which will be found only in this industry. The chief problem in selection has been to obtain satisfactory non-skilled employees for these jobs.

Job Specifications.—"The employment department prepared, and has on file, written specifications covering each of the jobs for which non-skilled labor can be hired. These specifications were prepared with the co-operation of the head of each factory department. They contain all the information that each foreman's experience could yield that was of value in selecting employees for every occupation in his department.

"These job specifications also contain a brief description of the duties of the job; the schooling or the sort of experience that is desirable in an employee; the posture of the employee, that is, whether employee will be sitting or standing, stooping or

walking; the preferable age, weight and height of an employee; whether employee should be right-or left-handed; the starting wage; the time taken by an average employee to earn an advance in wages; the probable maximum earnings of the position, and whether the job is steady or seasonal.

“The information revealed by these job analyses led to a grading of jobs according to the usual maximum earnings of each. The positions having the lowest earnings were designated as ‘C’ positions; those with a little higher wage range were designated as ‘B’ positions; and the most desirable places of all, with the highest wage range, were designated as ‘A’ positions. By grading positions according to the wage range of each group, the employment department was able to fill vacancies in grade A by transferring an employee from a grade C position. This policy of promotion from within opened new channels to advancement, and has resulted in the organization’s obtaining a higher type of employee for the grade C jobs, because even these have the ‘prospects for advancement’ which are needed to sustain the interest of the new employee who is ambitious.

New Employees.—“Requisitions for new employees are sent on a printed form to the employment department. These are usually sent at least several days before the employee is needed. For this reason the industry is able to select applicants from its waiting list who are working elsewhere, but who can be released from their employment by giving adequate notice of their intention to change. Applicants are asked to give this notice to their employers before

they are engaged by the Dennison factory. This reminds them of an obligation that they should discharge, and this custom has resulted in their invariably notifying, by several days in advance, their department foreman in our business of their intention of quitting. . . .

“When the applicant is engaged, the requirements of the position he is about to fill are clearly outlined to him. For this purpose the job analysis is followed, so that every point which should interest the new employee will be covered. On the subject of wages, care is used to under-estimate slightly the probable earnings, so that the new employee is not misled by a too favorable outline of the job. He is informed concerning the hours of employment, of the advantages that come from steady work, and of the aims of organization.

“When an employee reports for work he is given a copy of ‘Book of Information and Instruction,’ on the cover of which are printed his name and his department number. This book explains the industrial service activities of the company. This includes an explanation of the Dennison suggestion system, under which employees may obtain cash awards; the advantages of membership in the mutual relief associations; the operation of the factory savings and loan fund; the circulating library, and other company activities which offer many advantages to the employees. This book also urges employees to avoid accidents, and explains the provisions of the Massachusetts workmen’s compensation law, under which all employees are insured.

Training Department.—"The new employee is then sent to the training department, where he is taught the special knowledge necessary to equip him for his position. He is shown the most approved and best methods for doing the work, as determined by the time-study work of the efficiency department. He is taught such correlated knowledge as the principles of machine construction, how the materials he uses are made, and how to care for them. When the employee is familiar with the work he is to do, and is able to earn a specified wage, he is transferred to the actual manufacturing department.

"The purpose of this training department is two-fold. Its first function is to fit the employee for his particular work in the plant. It relieves the foremen of the trouble and expense of breaking in new help. It is supposed to do the work more quickly and more thoroughly than the foremen have time to accomplish it. Its second function is to pass on the vocational aptitudes of the new employee. In a plant with so many different classes of work, it is impracticable to predetermine the exact aptitudes that the applicants for the work may have. Psychological tests may do this in the future, but for the present, actual experience at the job is the only safe guide to follow.

"The employment department follows up the new employee during the first three months. If he is succeeding on the job, his wages will be advanced at an opportune time. Advances in wages are recommended in writing by department heads after each monthly examination of their payroll. The productive rec-

ords of the employee are referred to when such recommendations are made.

“These recommendations are sent to the employment department, and are checked against the records of each employee which are on file there. In addition to the name, age, rate of wages, and length of service of the employee, this record shows the number of suggestions and the number of errors made by him.

“Usually the pay recommendations are approved by the employment department and sent to the works manager for final approval. If a recommendation is questioned by the employment department, however, the reasons for not approving it are given to the works manager, who will not approve the recommendation unless some additional reasons for approving it are given by the department head.

Transfers.—“If an employee has not succeeded in the position in which he was placed, the employment department then takes up the matter of moving him to another department, or of dismissing him entirely from the service. Complete information about an employee’s shortcomings is obtained from the department head. Based on this information and upon interview with the employee, a decision with respect to disposing of the employee is made.

“The matter of transferring employees from one department to another required very careful study when the employment department was organized. Department heads, in the past, have passed on to one another many incompetent employees, and most of them looked with suspicion upon any new move to give employees a second trial, at another job.

“The policy of transferring employees from one department to another to promote them, as well as to give another chance to the promising employees who fail to ‘make good’ on their first jobs, however, has changed the attitude of the department heads towards transferring employees, and the industry now saves many employees to its service who would otherwise be lost. The reasons for transferring 219 employees in 1915 were: Advancing employees to better positions in other departments, 40 per cent; changing employees who asked to be placed on another line of work, 4 per cent; changing employees who were not adapted to the first job in which they were placed, 18 per cent; changing employees to other work when seasonal work for which they were engaged was finished, 29 per cent; changing employees to other positions for miscellaneous reasons, 9 per cent.

“Transfers of labor are recorded in the employment department only when an employee is taken from one department and placed in another under the supervision of a different department head. Employees may be advanced from one position to another in the same department without that fact being recorded in the employment department, or they may be changed from one kind of work to another within the same department. If this change is occasioned by the fact that the employee has not made progress on the first job, the employment department is notified.

“The Dennison Company has made a careful study of how to regulate the manufacture of seasonal goods. It has persuaded its customers to place orders very early in the year for holiday goods. It now makes

large runs of staple articles at periods of the year in which many of its facilities were formerly idle. It has developed an extensive line of specialties for St. Valentine's day, St. Patrick's day, Easter, and patriotic holidays which come during the first part of the year, and for which it employs the same machinery as was formerly used only for Christmas specialties. By dovetailing these activities it has kept its trained hands steadily employed, and has greatly reduced labor turnover and labor costs.

Leaving.—"When an employee decides to leave the company, notice of this decision is usually given a week in advance. The employment manager interviews the employee and records the reading on a printed "Leaving Slip." An effort is always made to get the true reason. Instances where an employee is dissatisfied either with his wages, his work, or the conditions under which his work is performed, are of especial concern to the employment department. If any employee has suffered an injustice, steps are taken to prevent a repetition of the complaint. Because the employment department has been interested to record the reason given by each departing employee for leaving its service, and to tabulate this information at intervals, it has been able to discover a number of common causes of dissatisfaction which resulted in large numbers of employees leaving.

"This information resulted in remedial recommendations being made which, when adopted, almost immediately resulted in stopping the exodus of dissatisfied employees. The number of employees lost by this company during one year because they were dissatis-

fied for one reason or another, probably was no greater than the number lost for similar reasons by other industries, because the average labor turnover of this industry was no worse than the average labor turnover of other industries in its class. However, by reason of the steps taken by the company to remove causes that tended to make employees dissatisfied, it was able to reduce these cases to such an extent that the total number recorded two years later represents only 17½ per cent of the total number who left previously because they were dissatisfied with either their wage or their work. This appears to be a remarkable showing when it is remembered that there are always in every industry types of restive employees, small in numbers, to be sure, who seem to be dissatisfied with any job, no matter how advantageous appears the opportunity for advancement it offers, or how fair its wage may be.

Dismissal.—“When it is necessary to discharge an employee, the department head notifies the employment department of his intention, and states the reason for such a step. In the event of an employee being discharged, the department head could not prevent his being placed in another department if it were decided to re-engage the employee later. The works manager, only, is empowered to exclude absolutely an employee from the organization, and this is done only in very rare cases.

Changes in Working Force.—“The effectiveness of the work of an employment department is usually judged by the extent to which it has succeeded in reducing the changes in the personnel of its industry.

Needless labor turnover is an expense that burdens many industries. A conservative estimate is that the expense of replacing an experienced hand averages \$50 in this industry. On this estimate, the savings represented by the reduction which has been effected in the labor turnover since the employment department was established on its present basis, approximates \$25,000. The figures of labor turnover for this industry, which represents not only employees who quit work, but also all who were laid off or dismissed for any causes, were: 1911—68 per cent; 1912—61 per cent; 1913—52 per cent; 1914—37 per cent; 1915—28 per cent.

“Although this marked reduction in the changes of the working force is, in itself, a sufficient justification for establishing and maintaining a central employment department, the Dennison company feels that other values, in addition, have accrued from the deeper study it has given to its employment problems.

“It has been worth a lot to learn from its own experience, for example, how vital to the contentment and efficiency of a working force it is to have as foremen men who, in addition to good judgment, have a manner that invites the friendship as well as the respect of employees.

“In the departments headed by men of this sort, an employee was rarely distressed because a reasonable request had not been readily granted, or because the foreman’s attitude in handling a matter requiring tact, as well as firmness, had been such as to invite friction. Foremen who were unfeeling and arbitrary in handling matters unimportant in themselves, have caused many valuable employees to leave the indus-

try, despite the fact that their earnings were very high and that their work was very interesting.

"It has been well worth while, also, for the industry to maintain, through its employment department, a point of contact with the employees that has resulted in their feeling free to express themselves with reference to the adjustments that they thought should be made in their work or in their wages, whenever a foreman seemed to them to be insensible to their desserts.

"It is because the employment department has been in a position to render such effective co-operation to heads of departments, and to extend such encouragement to those employees who may have found themselves temporarily out of harmony with their work environment, that its work in this business has been so well worth while."

Conclusions from the Experiences Cited.—We have thus considered the heart of an industrial organization as represented by its personnel department. Such a department is a necessity if right foundations are to be laid for right relations, for proper management of work and workers. Such a department does not, of course, presume to be able to solve every problem that arises in the relationship between employer and employed. There are fundamental matters of wages, hours, standards of living, and conditions of work, as well as the question of workers' participating more actively than they now do in the government of industry—the solution of such problems is not solely the duty of the employment department. These questions are bound to loom large and will have to be

faced. As a matter of fact they are being faced by progressive employers.

An employment, or personnel, department goes a long way toward bringing employer and employed into a right working relationship. It helps to do away with countless irritations and sources of friction. Its existence is an unmixed benefit to all concerned. In another chapter I deal with the equipment of the executive who is entrusted with the important work of this department. No industry and no plant can afford any longer to allow scattered personnel work. Such work is as much a function of the management as any other activity, whether it be production, financing, or selling. Therefore the experiences of such corporations as I have described offers suggestions of priceless value, even to smaller establishments, in which the owner may act as his employment manager, as was once commonly the case in the simpler days of industry.

CHAPTER IV

ORGANIZING THE LABOR SUPPLY

Sources of Supply Important.—No employment department may be said to be well organized until it has centered its attention properly upon the sources of labor supply and their efficient use in connection with the firm's business. It is astonishing to note how few firms have given this matter their serious attention; yet it is fundamental to sound business to secure capable workers and maintain the labor force.

One of the functions of a properly conducted employment department consists of the careful study of all available sources of labor supply, always with consideration of the needs of the firm and the requirements of the particular jobs. Job-analysis must precede any intelligent attempt to secure workers who will prove satisfactory. What job-analysis means will be explained in another section of this book.

After charting or "blue-printing" the jobs, the next step is to chart the sources of labor supply and check up those sources which most readily offer workers for those jobs. This chapter deals with sources that might serve as the basis for such a chart. Whether each of these sources is a desirable one, is a matter which individual experience only can determine. These sources have been used with varying

success by both large and small employers, and it may be interesting to the reader to have them treated in the light of a study made for the Massachusetts Bureau of Statistics of the Public Employment Office of Boston in its relation to employment departments of over one hundred firms, ranging in number of employees from 2 to 10,000, the total working force being over 68,000.

Public Employment Offices.—There are three kinds of public employment agencies in this country, viz., those controlled (a) by the state authorities (b) by cities, (c) by the United States Government. Of these the most developed are the State offices, which exist in fifteen states.* Municipal bureaus exist in eight states, state-city offices in one state, a city-private bureau in one state.

All kinds of help, skilled and unskilled, is available at these offices, but the largest number of applicants are of the unskilled class. The Cleveland state-city labor exchange places a high percentage of skilled workers, many of whom are college-trained. The public employment offices of Massachusetts, which are among the best in the country—though not as effective as they might be, owing to limited appropriations—report 19,120 positions filled by the Boston office during the year ending December 1, 1916, of which 59 per cent were for day, casual, and general unskilled labor, 27 per cent for positions requiring a certain degree of mechanical skill, 10 per cent for mercantile positions, and less than 4 per cent for clerical positions including stenography.

* See Appendix to Chapter IV, Page 119.

The great advantage of the public employment office over all others is in the opportunity it has for centralizing the labor market and disseminating information as to employment.

What W. H. Beveridge says in his book on "Unemployment," regarding the necessity and usefulness of labor exchanges applies directly to all forms of public employment offices.

The need for markets and the wastefulness of not having them are recognized in every other branch of economic life. . . . The wastefulness of hawking as an industrial method has not been perceived in regard to labor as much as in regard to other things. . . . Unless there exist well-organized public employment offices, both employer and employee are bound to lose, the former through checked or delayed production and loss of earning power of capital, the latter through earning time wasted as a result of seeking a market in the wrong direction.

A further advantage is that the public offices charge no fees for service, a matter of no little importance to the worker who has to part with a week's wages if he would obtain employment through private commercial employment agencies, which charge this customary fee.

The public employment office offers the employer an excellent opportunity to help organize his labor supply. If employment managers would take a keener interest in the affairs of these offices, they would be enabled to respond more effectively to the demands of the employment department.

Progressive states are now appointing advisory committees on which both employers and employees

are represented, in order that the public offices may be enabled to co-operate more closely with business and industry. An increasing number of employers are turning to the public offices for their workers—the practice is to try these offices first and then, if unsuccessful there, to try other agencies.

If employment managers would try more often to secure the majority of their workers, skilled and unskilled, from these offices, where such are generally available (if they are not available, they certainly should be), the higher grade of applicants would be more likely to offer themselves through this medium.

Private and Commercial Agencies.—The employment manager of the Ford Motor Company in Detroit is quoted as saying:

It is against our policy, absolutely, to hire any man who has to pay any one for a job, and our opinion is that we have better success otherwise.

This opinion reflects the attitude of enlightened employers everywhere. Some cities and states, realizing the abuses characteristic of many commercial employment offices, especially those handling the unskilled, have adopted stringent laws regulating these offices or abolishing them altogether.

Private agencies often notify those whom they have placed, of opportunities in other firms, perhaps at a higher wage. This means a new commission for them but they justify the policy on the ground that they are performing a valuable service for their patrons.

An interesting investigation of the sources of labor supply was made by the Cleveland Chamber of Com-

merce. One hundred and fifty-two employers and 18 cities replied to the questionnaire that was sent out. Only one-third of the employers ever made use of employment agencies, and of this number one-fourth used the quasi-public agencies. Five employers (1/30) stated that they received satisfactory results from private agencies. Three-fifths of the employers, who sought workers other than clerical or technical, answered that results were "poor" or "very poor." Several firms had abandoned the use of the agencies on account of unsatisfactory service.

The report indicates that most employers secured the larger proportion of the labor by (a) selection from applicants at their own establishments or (b) through their employees. Newspaper advertising was the source of next importance. Employment agencies were apparently used only as a last resort.

Of course, there are agencies which are conducted honestly and which have given good service, but their fees are exorbitant in view of the service offered. At any rate, the furnishing of information regarding opportunities for employment is a public function, and that is the basis for the existence of public offices supported by taxation.*

Philanthropic, or Quasi-Public Agencies.—Owing to the inadequate manner in which the public and private agencies have dealt with the problem of helping the worker find employment and aiding the employer in securing labor, various semi-public institutions have organized employment bureaus. Among these are charitable institutions, social settlements, the Y.

* Idaho Laws of 1915 Ch. 169, Sec. 2.

M. C. A., and civic associations. Employers will generally find these agencies in large cities and towns. They render useful service, and often send a better class of applicant than may be secured from other sources, because they are generally careful to look up the references of applicants.

Advertising.—One fruitful source of labor supply is advertising placed in local newspapers, and sometimes in those of other towns. It is expensive and not always satisfactory, but generally it brings many applicants to the employment department and offers the manager the opportunity of a fairly wide range of choice. Employment managers should remember that several states have laws providing that where there is a strike on at a plant and the firm advertises for new workers, a statement must be made in the advertisement that such a strike exists. Failure to do this incurs a penalty. A typical advertisement of this sort is the following:

STITCHERS WANTED—We want about 25 stitchers on our garments; clean, steady work at high prices; we guarantee wages to experienced operators while learning our work. Labor disturbance exists.
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There are two methods of advertising for help: (1) by a "direct" advertisement stating the conditions for employment and asking the prospective worker to apply at the office of the firm, and (2) by means of the "blind" advertisement, wherein the applicant is directed to write a certain Post Office Box number stating his qualifications, references, and the salary expected. The firm name is not given.

An example of each type is given below:

MACHINISTS—Capable men accustomed to machine tool work can secure steady employment on second shift with good wages; we are in need of men on lathes, turret lathes, planers, horizontal boring machines; also vise hands and machine erectors; 48-hour shop; time and half for overtime; no labor trouble; transportation refunded after two weeks of satisfactory service; Plainfield has a population of 35,000 and is located 25 miles from New York on the C.R.R. of N. J., and is a good home city in which to settle down. Write for application blank.

THE "DIRECT" ADVERTISEMENT

FOREMAN WANTED.

A large New York waist manufacturing concern wishes to establish a branch factory within 25 miles of New York; this is a splendid opportunity for a man who has experience in this capacity and who can secure sufficient labor; applications must state locality where you are acquainted and give full particulars as to previous experience. Address Foreman, 214

THE "BLIND" ADVERTISEMENT

The latter form—blind—of advertisement is more commonly used for the better class of positions open, and in the opinion of large employers is more satisfactory than the other form. It is possible by means of this method to make a preliminary judgment of the applicant through his letter, and sometimes an interview is unnecessary. The best letters are selected, and the writers are asked to call on the employment manager. Several hundred letters have been known to follow blind advertisements for good positions. Were such advertisements to give the name of the firm, the employment department would be swamped with personal requests for the positions open. These methods have, however, been overdone.

Trade and technical journals offer a good medium for securing trained workers.

Writing the Advertisement.—Much space, time, and money are wasted by many employers in writing copy for their “want ads.” Usually these advertisements must be written hastily and not enough time is taken to make them effective, to give them “punch”. A study of the “Help Wanted” columns of a newspaper reveals the inefficient way in which some firms seek to attract workers.

Some concerns find it comparatively easy to secure help through advertisements, but not a few employers in the needle industries, in which workers are scarce, have found it necessary to use a rather novel method in “Help Wanted” advertising in order to outdo their competitors. They have added the element of “human interest” to their advertising for labor. To illustrate, a half page in the Cleveland Press was recently used by the N. J. Rich Company, which produces knit goods. Instead of placing this advertisement in the dull section usually allotted to “want” advertisements, it was placed among the regular reading pages. Illustrations of the Rich Company building and of a section of their dining room were prominently displayed. Then appeared photographs of two workers, with the story of how one of them rose from a wage of \$7.10 per week as stock girl to a salary of \$16.50, in thirteen months. Illustrations of various machines were also shown. And in addition there was a description of the advantages offered to workers.

The following advertisement for a mechanical en-

gineer lays down specifications for the position in such detail that only a person who possesses special fitness is encouraged to apply. An advertisement like this prevents the waste that results from one written in general terms, which brings all sorts of applicants to the employment department only to be rejected as unsuitable.

**MECHANICAL ENGINEER
PLANNING DEPARTMENT.**

The largest company of its kind in the world has a position offering unusual opportunity to graduate mechanical engineer between 30 and 45 years old possessing the following qualifications:

Ability, after becoming thoroughly familiar with the works, to take orders and drawings and route the jobs from start to finished product, through the various departments, taking advantage of every resource to expedite delivery and reduce cost of production.

Experience at piece work rate setting on heavy accurate machinery, and the necessarily large quantity of small component parts of these machines. Must be thoroughly familiar with modern time study and labor cost estimating methods.

We require a man of considerable executive capacity, and unusual tact in order to get fullest co-operation of those with whom he comes in contact. We also require a man who has actually been employed in this line of work and has successful record.

State age, married or single, height, weight, education and training, actual experience, by whom previously employed, and salary expected. All you say will be kept confidential, so give all details of experience, relative to requirements outlined above. G. 895 Times Downtown.

FIG. 1.

When good salesmen are wanted, the ordinary advertisement is not likely to bring satisfactory applicants. Advertisements like the following draw good

men. They possess interest, and differ from the ordinary cut-and-dried, lifeless request which fills the "Help Wanted" columns but not the vacancies.

SALESMAN WANTED.
Corporation doing \$8,000,000 worth of business annually, with highly successful sales force and great volume of advertising, will employ salesmen who have good moral character, are well recommended, have had selling experience, and are about 30 years old; education, ability, and appearance will be assets toward rapid promotion. We make working arrangement with salesmen, paying commission, drawing account, and transportation, and furnish genuine leads. If you wish to be considered kindly state age, education, and experience. Address Executive, D 21 Times.

FIG. 2.

The advertisement should be concise, should state facts clearly, and should be placed in a form that immediately attracts attention. When possible it should be drawn up by the advertising manager. The reader is asked to note the difference in form between the following advertisements. Number three is in conventional form. Number four is difficult to read and remember. The others show what can be done by means of an intelligent use of white space.

ASSISTANT EXECUTIVE.—Exceptional opening for young man, about 24 to 28 years, with natural ability, to develop opportunities offered for future advancement; must be quick and accurate and able to handle details; give age, religion, experience, references, and salary. M. 87 Times.

FIG. 3.

CAPABLE MAN FOR POSITION AS
STORE SUPERINTENDENT-MAN-
AGER WANTED. ONE WHO CAN
SUPERVISE AND TAKE ACTIVE
MANAGEMENT OF HIGH CLASS
RETAIL READY-TO-WEAR
SPECIALTY HOUSE WHICH HAS
BEEN ESTABLISHED FOR
TWENTY-FIVE YEARS IN LOS
ANGELES, CALIFORNIA. WE ARE
NOT LOOKING FOR A BUYER.
BUT WANT A LIVE, UP-TO-DATE
MAN WHO HAS BEEN USED TO
HIGH-CLASS RETAIL TRADE TO
ASSURE MANAGEMENT OF THE
ESTABLISHMENT. ADDRESS
MD28, WOMENS WEAR, 822 BWAY
31110

FIG. 4.

HELP WANTED—MALE.

MACHINISTS.

Lathe, planer and shaper hands, milling machine and slotter hands, vertical and horizontal boring mill hands, floor and bench hands, assemblymen, vise hands.

First class men only who can handle heavy, accurate work; excellent conditions, new machines; no labor trouble; highest rates.

Reply, giving age and experience to J. B. M., P. O box 1322, Philadelphia, Pa.

FIG. 5.

COLLEGE GRADUATE.

A prominent mercantile concern employing a large number of men between the ages of 18 and 25 is looking for a man between 25 and 35 years of age to take charge of the hiring of their male employees. This position has splendid opportunities for the man to progress in one of the most important phases of business activity. Ability to develop himself and his position is more important than experience. He must be a clear, logical, and careful "thinker," as well as accurate "doer." State education experience, age, and salary expected. All replies treated confidential. Y 239 Times Annex.

FIG. 6.

Public and Commercial Schools.—Through the continuation schools, trade schools and high schools of commerce it is possible to obtain excellent young, ambitious workers. The elementary training received by these boys and girls makes it possible for them to adapt themselves quickly and effectively to the requirements of the work that they take up. A wise employment manager will keep in close touch with school principals, as the Curtis Publishing Company of Philadelphia and other large firms are doing.

The continuation-school method provides that the worker spend a number of hours per week (usually four) at school, during the regular work period. The firm co-operates to the extent of paying the worker for these hours spent in training. Results of this arrangement have been highly satisfactory, and the movement is spreading rapidly.

Examples of Trade Understandings.—Other sources of supply from which workers may be obtained, are the trade schools and vocational schools. Trade agreements, or "trade understandings," have met

with signal success in many cities and industries. According to these arrangements, advisory committees of citizens are appointed by the local school authorities, on which employers and workers are equally represented. The school authorities, with the assistance of these committees, plan the work of the school—including entrance requirements, equipment, course of study, methods of instruction, examination, of pupils, graduation, and so on—and also undertake to place the pupils in good positions when they leave the school.

Typical agreements of this kind are presented here. They were made in connection with the recent vocational education survey in Minneapolis. (The Dunwoody Institute is a prominent technical school in that city.)

Type I.*—Two of these are given here, one in the case of a girls' occupation and the Girls' Vocational High School, and one in the case of a boys' trade and the Dunwoody Institute.

The girls' occupation selected is that of salesmanship. Similar understandings were made for dress-making, garment industries, and millinery, the only difference being in the make-up of the advisory committee.

In order to insure to young people who wish to become efficient salesmen proper training, afteremployment and a successful career in the business, the following tentative suggestions are made for the city of Minneapolis:

*Bulletin, U. S. Bureau of Labor Statistics, No. 199, pp. 525, 526, 527.

1. That the present school of salesmanship in the Girls' Vocational High School continue to receive pupils who have completed at least the work of the elementary school.

2. That the first three months of a pupil's career in the salesmanship classes be used as a probation period for the purpose of testing the pupil's interest and fitness for salesmanship work.

3. That the remainder of a full two years' period, consisting of two full school terms of 10 months each, be given to the further training in salesmanship work of the pupils thus selected.

4. That an advisory committee of six citizens of Minneapolis be appointed by the board of education, three of whom shall be employers and three employees engaged in merchandising; the employers on the committee to be appointed from a list of not less than 10 approved merchants furnished by the Retail Merchants' Association of the city. The superintendent of schools and the principals of the schools in which courses in salesmanship are given shall be members ex officio of the committee.

5. That the school authorities, aided by the advice and recommendation of the advisory committee, standardize the entrance requirements, the equipment, the course of study, the methods of instruction, the testing of pupils, the commercial experience of pupils, and so forth, while in the school, and the graduation and placement of pupils in the stores.

6. That upon the completion of two years' training, the pupils so desiring be placed in the stores of the city that are parties to the understanding, according to a plan to be worked out by the school authorities aided by the advice of the advisory committee.

7. That these pupils be placed in the stores on probation for one year, the diploma of the school being withheld until

proof of satisfactory work is furnished at the close of one year, provided services are satisfactory.

8. That these new employees be paid an initial wage of not less than \$3 a week upon entering the stores.

9. That, with the assistance of the advisory committee, the career or experience of the pupil, including the instruction which she is to receive after entering the store and during the probationary year, be drawn up, chartered and carried out by the stores which are parties to this understanding.

10. That arrangements be made whereby the services of public continuation classes containing not less than 15 pupils be provided free for those stores desiring such services.

11. That the stores that are parties to this understanding are to agree that they will use the pupils coming out of this two-year period of training as their source of supply in employing new workers until such supply has been exhausted.

12. That the understanding shall be subject to change and ratification at the close of each school year.

I (we) hereby approve of the above understanding and agree to carry it out so far as I am (we are) concerned.

Signed.....

(Name of merchant or firm.)

The boys' trade selected is that of the carpenter. Similar arrangements were made for printing (press-work), cabinetmaking, electrical work, telephony, automobile repair and construction, the only difference being in the amount of the initial wage paid, the range being from \$2 to \$2.50 a day. In the case of all the foregoing trades taught in the day classes of the Dunwoody Institute, the agreements signed by the employers and approved by employees, included the arrangements for the evening classes as well, as will be noted in the case of the carpenters. These

evening classes will be discussed under a later type.

Carpenters.—Memorandum of courses for carpenters at the William Hood Dunwoody Industrial Institute.

I. Evening classes:

- (a) Free evening classes will be open to apprentices and journeymen carpenters.
- (b) Classes will begin in October and continue through the winter.
- (c) The brief courses will be offered as long as an average attendance of not less than 12 persons is maintained.
- (d) Upon the satisfactory completion of any unit course in the evening school, the student will be given a certificate which will show his attendance and his progress.

II. Day classes:

In order to insure young people who wish to become efficient carpenters proper training, afteremployment, and a successful career in the business, the following tentative suggestions are made for the city of Minneapolis:

- (a) That a two years' course of training for carpentry work be continued in the William Hood Dunwoody Institute.
- (b) That the first three months of a pupil's career in the carpentry classes be used as a probation period for the purpose of testing the pupil's interest and fitness for carpentry work.
- (c) That the remainder of a full two years' period, consisting of two full school terms of 10 months each, be given to the further training in carpentry work of the pupils thus selected.

- (d) That an advisory committee of six members be appointed by the board of trustees of the Dunwoody Institute, consisting of citizens of Minneapolis who are engaged as employers and employees in carpentry work. The principal of the Dunwoody Institute and the director shall be members ex officio of the committee.
- (e) That the school authorities, aided by the advice and recommendation of the advisory committee, standardize the entrance requirements, the equipment, the course of study, the methods of instruction, the testing of pupils, the commercial experience of the pupils, etc., while in the school, and the graduation and placement of pupils in the carpentry shops of the city.
- (f) That upon the completion of two years' training, the pupils so desiring be placed in the shops of the city that are parties to the understanding, according to a plan to be worked out by the school authorities, aided by the advice of the advisory committee.
- (g) That these pupils be placed in the shops on probation for one year, the diploma of the school being withheld until proof of satisfactory work is furnished at the close of one year, provided services are satisfactory.
- (h) That these new employees be paid an initial wage of not less than \$2.25 a day upon entering the shops.
- (i) That, with the assistance of the advisory committee, the career or experience of the pupil, including the instruction which he is to receive, after entering the shops and during the pro-

evening classes will be discussed under a later type.

Carpenters.—Memorandum of courses for carpenters at the William Hood Dunwoody Industrial Institute.

I. Evening classes:

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- (b) Classes will begin in October and continue through the winter.
- (c) The brief courses will be offered as long as an average attendance of not less than 12 persons is maintained.
- (d) Upon the satisfactory completion of any unit course in the evening school, the student will be given a certificate which will show his attendance and his progress.

II. Day classes:

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- (c) That the remainder of a full two years' period, consisting of two full school terms of 10 months each, be given to the further training in carpentry work of the pupils thus selected.

- (d) That an advisory committee of six members be appointed by the board of trustees of the Dunwoody Institute, consisting of citizens of Minneapolis who are engaged as employers and employees in carpentry work. The principal of the Dunwoody Institute and the director shall be members ex officio of the committee.
- (e) That the school authorities, aided by the advice and recommendation of the advisory committee, standardize the entrance requirements, the equipment, the course of study, the methods of instruction, the testing of pupils, the commercial experience of the pupils, etc., while in the school, and the graduation and placement of pupils in the carpentry shops of the city.
- (f) That upon the completion of two years' training, the pupils so desiring be placed in the shops of the city that are parties to the understanding, according to a plan to be worked out by the school authorities, aided by the advice of the advisory committee.
- (g) That these pupils be placed in the shops on probation for one year, the diploma of the school being withheld until proof of satisfactory work is furnished at the close of one year, provided services are satisfactory.
- (h) That these new employees be paid an initial wage of not less than \$2.25 a day upon entering the shops.
- (i) That, with the assistance of the advisory committee, the career or experience of the pupil, including the instruction which he is to receive, after entering the shops and during the pro-

evening classes will be discussed under a later type.

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I. Evening classes:

- (a) Free evening classes will be open to apprentices and journeymen carpenters.
- (b) Classes will begin in October and continue through the winter.
- (c) The brief courses will be offered as long as an average attendance of not less than 12 persons is maintained.
- (d) Upon the satisfactory completion of any unit course in the evening school, the student will be given a certificate which will show his attendance and his progress.

II. Day classes:

In order to insure young people who wish to become efficient carpenters proper training, afteremployment, and a successful career in the business, the following tentative suggestions are made for the city of Minneapolis:

- (a) That a two years' course of training for carpentry work be continued in the William Hood Dunwoody Institute.
- (b) That the first three months of a pupil's career in the carpentry classes be used as a probation period for the purpose of testing the pupil's interest and fitness for carpentry work.
- (c) That the remainder of a full two years' period, consisting of two full school terms of 10 months each, be given to the further training in carpentry work of the pupils thus selected.

- (d) That an advisory committee of six members be appointed by the board of trustees of the Dunwoody Institute, consisting of citizens of Minneapolis who are engaged as employers and employees in carpentry work. The principal of the Dunwoody Institute and the director shall be members ex officio of the committee.
- (e) That the school authorities, aided by the advice and recommendation of the advisory committee, standardize the entrance requirements, the equipment, the course of study, the methods of instruction, the testing of pupils, the commercial experience of the pupils, etc., while in the school, and the graduation and placement of pupils in the carpentry shops of the city.
- (f) That upon the completion of two years' training, the pupils so desiring be placed in the shops of the city that are parties to the understanding, according to a plan to be worked out by the school authorities, aided by the advice of the advisory committee.
- (g) That these pupils be placed in the shops on probation for one year, the diploma of the school being withheld until proof of satisfactory work is furnished at the close of one year, provided services are satisfactory.
- (h) That these new employees be paid an initial wage of not less than \$2.25 a day upon entering the shops.
- (i) That, with the assistance of the advisory committee, the career or experience of the pupil, including the instruction which he is to receive, after entering the shops and during the pro-

it can not be less if best students are to be attracted to the course, which will require them to forego four years of wage earning in order to make the preparation demanded for present-day efficiency.

Type III.*—These understandings were made in the case of the four building trades of bricklaying, painting, plastering, and plumbing. The arrangements are the same, with the exception of the wage paid the apprentice attending the school, this difference being due to the difference in wage paid the apprentices in the different trades. It will be noted here again that the arrangements for evening school are included in the understanding with the bricklayers for the dull-season school, which is true for the other three trades. Attention is called to the dull-season arrangement only.

Bricklayers.—Memorandum of courses for bricklayers at the William Hood Dunwoody Industrial Institute.

I. Evening classes:

- (a) Free evening classes will be open to apprentices and journeyman bricklayers and masons.
- (b) Classes will begin in October and continue through the winter.
- (c) The brief courses will be offered as long as an average attendance of not less than 12 persons is maintained.
- (d) Upon the satisfactory completion of any unit course in the evening school, the student will be given a certificate which will show his attendance and his progress.

* Bulletin, U. S. Bureau of Labor Statistics, No. 199, pp. 528, 529.

II. Dull-season classes :

- (a) An advisory committee shall be appointed by the trustees of the Dunwoody Institute, consisting of two employers and two employees. It shall be the duty of this committee to assist the officials of the Dunwoody Institute to standardize the work of the school herein proposed and to assist in carrying out this trade understanding.
- (b) The union shall require all apprentices in organized labor during the entire period of their apprenticeship to attend at least five days a week an all-day school at the Dunwoody Institute for the months of January and February.
- (c) Arrangements shall be made with the contractors so that the apprentice shall give during this dull season one-half the time spent at the school and the contractor pay for one-half of the time; that is to say, that the apprentice shall be paid one-half his usual wages while attending school.
- (d) In order to insure the attendance of the apprentice upon the school and his completion of all the training, the money due from the contractor to the apprentice for attendance upon the school shall be withheld and paid to him as a lump sum upon the completion of the full period of apprenticeship. The school authorities shall make such reports as to the attendance, conduct, and progress of the apprentice as the employer and the union may require. When the apprentice is absent with the consent of the school authorities, he shall lose the wage paid for the time by the employer, but when he is absent without the consent of the school authorities he

shall lose twice the amount of his wage. If his attendance, conduct, or progress continues to be unsatisfactory to the authorities of the school or to the employer or the union, the case shall be referred to the advisory committee, which shall have authority to release the union and the employer of any further responsibility or obligation for the employment or training of the apprentice.

- (e) One-half of the time of the apprenticeship in the school shall be given to the practical work of bricklaying and one-half to technical and academic work.
- (f) At the close of the period of apprenticeship, the apprentice shall be given a diploma by the Dunwoody Institute for the work which he has satisfactorily completed at the school and in the trade.

Type IV.*—This consists of the indorsement of the evening classes at the Dunwoody Institute by the different trades. These indorsements are a part of the same trade understanding made by the different trades for the all-day and dull-season classes. No additional copy of this arrangement is given here, as it will be found in the agreement for carpentry and bricklaying as given in full in the foregoing. These indorsements for evening classes appear in trade understandings for the following: Automobile repair and construction, bricklaying, baking, carpentry, electrical workers, telephone construction and operation, machine shop, painting, plastering, plumb-

* Bulletin, U. S. Bureau of Labor Statistics, No. 199, p. 529.

ing, printers and pressmen, steam fitting, cabinet-making, sheet-metal lines.

Type V.*—This type represents an arrangement made with the steam fitters which requires all helpers entering after August 1, 1915, to attend evening classes at the Dunwoody Institute for two seasons.

Steam Fitters.—Memorandum of courses for journeyman steam fitters and helpers at the William Hood Dunwoody Industrial Institute.

I. Evening classes:

- (a) Free evening classes for journeyman steam fitters and helpers will be offered at the Dunwoody Institute for the year 1915-16.
- (b) These classes will begin in October and continue through the winter.
- (c) Classes will be continued so long as an average attendance of not less than 12 persons is maintained.
- (d) The unit courses attached to this report will be offered.
- (e) Upon the completion of any unit course a certificate to this effect will be issued to the student by the Dunwoody Institute.

II. The training of helpers:

- (a) The Steam Fitters' Union is to require all helpers in organized shops entering the steam-fitting work after August 1, 1915, to attend, for two seasons of not less than seven months each, evening classes at the Dunwoody Institute bearing on steam fitting not less than two nights a week.

* Bulletin, U. S. Bureau of Labor Statistics, No. 199, p. 530.

- (b) The employer shall agree to give preference in the employment of workers to the helpers attending such classes, and in the reduction of their force in dull times to give the same preference.

III. The advisory committee:

- (c) That an advisory committee of five members be appointed by the trustees of the institute, two of whom shall be employers and two employees engaged in the steam-fitting business. The fifth member of the committee, who shall be its chairman, shall be a representative of the school.
- (d) The authorities of the school, with the advice and assistance of the advisory committee so secured, are to assist in standardizing the work of this dull-season school.

I (we) hereby approve of the above understanding and agree to carry it out so far as I am (we are) concerned.

Signed.....

(Name of person or firm.)

Colleges and Business Schools.—Two important sources of material for the development of executives are colleges and the business schools connected with universities. The college-trained worker is quick to learn and, if of the right sort, is willing to start at the bottom. Here is a new source of supply, and one in which thinking employers see large possibilities. Some large firms are making co-operative arrangements with colleges whereby students spend their summer-vacation periods in employment, so that by the time they are ready to graduate they will have had a fair start in the business.

The ideal arrangement will be the one by means of which a student may arrange his program so that his studies will link themselves up with business practise, and may also spend a certain portion of his college time gaining actual business experience. This is the method that Dartmouth College is trying to work out through its school of business. Such a plan has been launched by the National City Bank of New York in co-operation with some of our largest Eastern universities, in order that students might be trained for the banking service in its foreign branches. The co-operating universities, under this plan, select each year a few of their best students to receive a year's training in practical banking during the undergraduate period. Two summer vacations and six months during the student's senior year constitute the course. Attractive salaries are offered during and after the course.

The Massachusetts Institute of Technology has a plan in its Department of Chemistry and Chemical Engineering which will enable the student, at the end of his third year, to select either the regular four-year course giving the Bachelor of Science degree, or the five-year course offering the Master's degree. Only promising students are permitted to take the latter course; the greater part of a year is spent by these men in manufacturing plants, where instruction facilities are offered by the firms.

Some of the firms co-operating in this plan are: Eastern Manufacturing Company, Bangor, Maine, makers of electrolytic caustic soda and calcium hypochlorite, cellulose from wood, and bond and ledger

papers; New England Gas and Coke Company, Everett, Mass., makers of gas, coke, ammonia, and coal tar by-products; Carborundum Company, Niagara Falls, N. Y., makers of carborundum, silicon, and other electric-furnace products; American Synthetic Color Company, Stamford, Conn., makers of phenol, picric acid, dye-stuffs, and coal-tar intermediates; Atlas Portland Cement Company, Northampton, Pa., makers of Portland cement.

When the period of practical experience is over, the student returns to the college for his year of graduate study. A report of the Department states that among the notable features of this work are: "The opportunities afforded for a systematic and carefully planned experience in manufacturing plants of varied and suitable character, under the guidance of competent instructors, which affords an opportunity not only for the acquisition of a knowledge of operating conditions, but also for contact with the human element in the industrial field, the lack of which is so often the object of criticism of the graduates of colleges and technical schools."

Some of the large industries are establishing business fellowships in universities in order to obtain trained workers. The investment is a profitable one.

Agents.—Some firms employ agents to secure their help. These men travel about to industrial centers and other places in search for workers—mostly of the unskilled class. They make the bargain with the prospect, and often provide his fare to the place of employment. Such agents are generally used by

plants located in small communities, where the labor supply is limited.

For example, the Cheney Silk Mills of Manchester, Connecticut, when in search of foreign help, advertise in the foreign newspapers published in New York City, setting a time during which applicants may be interviewed at the National Employment Exchange. The employment manager, accompanied by the factory physician, goes over to New York, selects the workers and brings them back with him. The Hood Rubber Company of Watertown, Massachusetts, employs two agents, who visit the New England states.

A word of warning is here necessary. Agents who secure workers from localities other than their own, in their endeavor to "make good" sometimes resort to artifice, misrepresentation and other questionable practices. Nothing will do more to destroy the goodwill and the general reputation of the firm than such tactics. It is impossible for a worker to give his employer the best that is in him if he has been "Shanghaied" into a job that is something far different from what the agent represented it to be. Often such a worker brings his family with him, and finds it difficult and expensive to give up the work and return to his home town. He becomes one of the discontented, a liability rather than an asset to the firm that employs him.

One of the means of attracting workers to such places is the plan of providing dwelling houses for employees at low rental cost. Or the worker may be offered the opportunity of purchasing his home at a reasonable figure.

What the firm does for the education and welfare of its employees offers another attraction. When Henry Ford announced his profit-sharing plan, thousands went to Detroit to apply for work with his firm. This, however, is an extreme case. It was really the wages offered that induced the pilgrimage. It is not only the unskilled whom agents generally seek. The General Electric Company has traveling representatives who make it their business to visit colleges and technical schools, where they tell of the opportunities open with this company, and where they can meet students who measure up to the requirements of available positions.

Trade-Unions.—In some industries it is necessary to obtain practically all the workers through trade-unions. These unions often conduct their own employment offices.

As a result of the garment workers' strike in New York in 1910 the issue between the closed shop, advocated by the union, and the open shop—for which employers fought—was settled by a compromise which established the preferential union shop. This is a shop in which union conditions prevail, and in which the employer, all things being equal, must give preference to union members in hiring help. For example, John Doe, a union man, and Richard Roe, a non-union worker, apply to the X Company for work. Both are good, capable men. According to the agreement between the company and the union, John Doe must be engaged. But should Richard Roe be the more capable worker, then John Doe need not be hired. This method offers a real solution to the

vexing question of the open shop versus the closed shop.

Other Sources.—Employers are sometimes in a position in which they can secure workers from other firms in the trade where work is slack, or where the working force must be cut down. In such cases there is some co-operative arrangement whereby firms are notified of available workers. But this is a method which is often abused.

By far the best way to obtain workers, in the opinion of a large number of employers, is to have the employees of the firm recommend their friends. A worker who does this feels a certain responsibility, and consequently is not likely to recommend any one who he does not really believe would make a capable employee. Where such friends are hired there is sure to result a better spirit of loyalty among the workers. Some employers believe so thoroughly in this method that when vacancies occur they consult their employees before drawing upon outside sources.

In retail establishments one often finds that employees are engaged because they have been recommended by customers. Opinion is conflicting as to the value of this method of supply, but it is worth testing out.

Some plants secure many of their workers by posting "Help Wanted" signs on their buildings. This, in the opinion of large employers, is an unsatisfactory method, since it brings in drifters and other undesirables. The relation between a high labor turnover and this source is obvious.

The employment department itself cannot be ac-

curately described as a source of labor supply. It is really a clearing house for applicants, and as such it should marshal its resources as has been here suggested. It is a highly desirable thing to establish the policy of giving the firm's employees in good standing preference over newcomers, when vacancies occur. This can be done through a well-defined, well-organized system of promotions, and includes careful recording of each individual's progress in the firm. Another chapter will discuss the scheme more in detail.

A step in the right direction is the policy of giving preference to former employees, especially those who spent some time with the firm before leaving, and who left voluntarily. It takes time, effort and money to train new workers. If an employee has left to better himself and comes back with the broadened experience obtained with other firms, he will be a valuable asset. Of course, considerable discretion must be exercised in such instances by the employment manager.

Conclusions.—There must be a proper co-ordination of the employment department with the sources of labor supply. The procedure of hiring workers, in the large majority of firms, is more or less unsystematic and haphazard. In too many cases, careful thought has not been centered on the department as a factor in the efficiency or inefficiency of the business, in the high cost and waste of large labor turnover, and in the quality of the working personnel.

More co-operation than generally is practised, is necessary between the employment department and

the other departments. One should be able to secure from the employment department immediate information concerning the labor requirements of all departments and the sources from which these requirements may be satisfied.

Just as the Purchasing Department studies its market with infinite care, so the Employment Department must keep its finger on the pulse of the labor market in order to be thoroughly informed in regard to its condition at all times. Employment managers cannot afford to take a passive attitude toward the labor market. They must develop it so that it will better meet their needs, and this development can best be accomplished through the co-operation of employment managers in demanding a high quality of applicants. A strong influence for mutual good may then be exerted upon employment agencies. Employment managers should take active interest in the development of public labor exchanges, and so make them more satisfactory and efficient.

Having obtained a thorough knowledge of what each job in the firm requires, employment managers should seek to develop the means of meeting these requirements, either by working with schools and colleges or by providing facilities within the business or the industry itself for training recruits.

An important function of the employment department, especially in a business which is seasonal, is to plan ahead for the utilization of the labor force in the busy season. Departments in need of help should be required to send in requisitions for labor long enough in advance so that the proper kind of worker

may be secured. A valuable addition to the technique of the employment department would be a prospect file containing full information regarding possible workers. Employees should be hired during the dull season and trained during that time in order that they may be ready to do the work of the busy season efficiently. Better than this plan is that whereby the regular workers are retained when the dull season comes, and then are taught the operations or processes upon which they will be employed when their regular work has slackened up. These processes may be entirely new ones, and such as would be necessary if the firm should try to develop a new line of goods. Such a plan has been successfully operated by the Dennison Manufacturing Company, Framingham, Massachusetts, which produces tags and paper novelties. A wise management will arrange conferences of department heads and employment departments to effect such an arrangement.

The various sources of labor supply have now been dealt with, but we should not forget that whatever the source, it will be impossible to attract the right kind of workers who will remain for any length of time, unless the management offers a wage that invites capable applicants.

APPENDIX TO CHAPTER IV
PUBLIC EMPLOYMENT OFFICES

(See page 88)

STATE OFFICES

*California:*Oakland
Sacramento
San Francisco*Connecticut:*Bridgeport
Hartford
New Haven
Norwich
Waterbury*Colorado:*Colorado Springs
Denver (two offices)
Pueblo*Indiana:*Fort Wayne
Indianapolis
South Bend*Iowa:*

Des Moines

Kansas:

Topeka

Kentucky:

Louisville

*Massachusetts:*Boston
Fall River
Springfield
Worcester*Michigan:*Battle Creek
Bay City
Detroit

Flint

Grand Rapids

Jackson

Kalamazoo

Lansing

Muskegon

Saginaw

Minnesota:

Duluth

Minneapolis

St. Paul

Missouri:

Kansas City

St. Joseph

St. Louis

New York:

Albany

Brooklyn

Buffalo

Rochester

Syracuse

Ohio: (State-City)

Akron

Cincinnati

Cleveland

Columbus

Dayton

Toledo

Youngstown

Oklahoma:

Enid

Muskogee

Oklahoma City

Tulsa

Pennsylvania:

Altoona
Du Bois
Harrisburg
Johnstown
Philadelphia
Pittsburgh

Rhode Island:

Providence

Wisconsin:

La Crosse
Milwaukee
Oskosh
Superior

CITY—PRIVATE OFFICE

Louisville, Kentucky.

FEDERAL EMPLOYMENT OFFICES

These offices represent the eighteen zones into which the country is divided for this purpose:

Boston, Mass.
New York, N. Y.
(Including Newark)
Philadelphia, Pa.
Baltimore, Md.
Norfolk, Va.
Jacksonville, Fla.
New Orleans, La.
Galveston, Tex.
Cleveland, O.

Chicago, Ill.
Minneapolis, Minn.
St. Louis, Mo.
(Including Kansas City)
Denver, Col.
Helena, Mont.
Seattle, Wash.
Portland, Ore.
San Francisco, Cal.
Los Angeles, Cal.

MUNICIPAL OFFICES

California:

Berkeley
Fresno
Sacramento

Illinois:

Chicago

Montana:

Butte

New York:

New York City

Oregon:

Portland

Texas:

Dallas
Fort Worth

Virginia:

Richmond

Washington:

(Federal-Municipal)

Tacoma

Everett

Seattle

Spokane

CHAPTER V

ANALYZING THE JOBS

Responsibility of Employment Executive.—The employment executive has a double responsibility in connection with keeping informed as to just what the work opportunities of his business are. One responsibility is toward the ownership of the concern, to serve it intelligently in every detail with respect to the wise selection of employees for particular positions. But his larger responsibility, perhaps, is toward the employees, whom he must select and fit properly into positions, personally or through the agency of subordinates. Indeed, we may go a step further, and say that the employment manager has a still higher duty, toward the community, and that he can fulfil that duty only by understanding correctly the particular field in which he himself is employed, and by working in it for the public good.

Hiring a worker is making a "human investment," and no important factor can be overlooked. On the other hand, choosing a job is making a personal investment which may determine the success of many years, or even of a lifetime, for the individual. Thus the worker, on his part, is rightly entitled to know just what an occupation or a particular job will mean for him. This information he may not be able to

secure for himself; if he cannot, he must be given help. Under modern conditions, his most important and most immediate help may come from the man who employs him. This is true because the employer has in mind not only the interest of the concern, but the lasting interest of the worker, so that he will try to fit the man intelligently into a job, in order that it may lead to a permanent, profitable, and satisfying position. Accordingly, the personnel manager must, in a sense, "blue-print" the employment opportunities with which he is connected. This work may, of course, be done by a subordinate department, under the direction of the manager, as I shall show later in this chapter.

Importance of the Industrial Survey.—The employer may find an example of the study of an occupation, as a whole and in its separate parts or jobs, in the industrial survey made in many communities in the interests of vocational guidance and vocational education. Indeed it is well known that the vocational-guidance movement has produced the employment-managers' movement. The first employment-managers' association resulted from a study of employment opportunities in a large number of places of business and industry in Boston, in 1910, 1911, and 1912. Now business and industry must themselves share or take over the responsibility of making their work opportunities known to those who are seeking employment.

The Boston Survey Schedule.—I present here the schedule used for the Boston investigation, and later extended to other communities so as to include coun-

try-wide conditions and results. An occupation or an establishment is visited first as a whole, and questions are asked which involve nearly fifty points of view. The answers range all the way from the name and the nature of the firm, down to the information to be secured from the Federal Government and from books by authorities in the various fields. The job is but a part of the occupation; both must be known and charted. The Boston Schedule follows, pages 124-125.

Occupation.—Dr. Charles R. Richards, Director of Cooper Union, New York, made one of the best statements extant on “What We Need to Know about Occupations” in an address under that title at the “Second National Conference on Vocational Guidance.” This address may be considered as setting a standard by which we may measure up an occupation. I quote it here in part.

“The points which I want to emphasize represent simply an attempt to bring out what seem to me to be the fundamentals necessary in studying the industries. The data that I have here are arranged in these main headings: the economic data; what might be called the physical data, concerning the occupation and the influence of the occupation upon character. . . .

Economic Data on Occupations.—“Let me take these up serially with you, first on the side of the economic data. One of the things that we need to know is the size of the industry, as represented in the country, and its importance. On the other hand, we have to know the size of the occupation in the locality. Oftentimes very large occupations and industries

SCHEDULE FOR OCCUPATIONAL STUDY

.....		
		Nature of Occupation			
			Date of Inquiry	
				
NAME OF FIRM		Their ages			
Address		Previous Jobs			
Supt. or Employment Mgr.		Previous schooling		Are any continuing this training? Where?	
Total number of employees { Male					
Number of girls and boys { Female					
Has there been a shifting in relative numbers					
of each?					
PAY		THE INDUSTRY			
Wages of various groups, and ages		a. Physical conditions		b. What variety of skill required?	
WAGES AT BEGINNING		c. Description of process (Photos if possible)		d. What special dangers	
SEASONAL		Machinery		Dust	
RATE OF INCREASE		Moisture		Hard labor	
a. On what dependent?		Strain		Monotony	
b. TIME or PIECE payment — any premiums or bonus?					
BOYS					
How are boys secured?					

SCHEDULE FOR OCCUPATIONAL STUDY

(Reverse)

Competitive conditions of industry	Union, non-union, or open shop?
Future of industry	Comment of Employer
What chance for grammar school boy?	Will he attend employment conferences if asked to do so?
High school graduate?	Comment of Foreman
Vocational school graduate?	Comment of Boys
What opportunity for the worker to show what he can do in other departments?	

TESTS

What kind of boy is desired?	Health Board comments
What questions asked of applicant?	Census Bureau report on this occupation
What tests applied?	Bibliography

What records kept?
(Collect all printed questionnaires and records.)

.....*Investigator*

are purely local, and in the matter of guidance, as well as in the matter of education, we must take in such a fact. We have here in the city of New York tremendous concentration of the clothing industry! We have in various cities of this state and of New England a like concentration of the textile industries. We have such things as the manufacture of books, which is to a very large extent a localized industry.

“A further point: Is this industry a growing or a diminishing field? Is it something that is passing out, or is it growing? There are many industries that in the last twenty-five years have been entirely transformed, through machinery, from the handwork stage to the mill and factory stage. (I must draw my illustrations mainly from industries rather than from other large fields of occupation.) It wasn't many years ago that there were a great many cabinet makers' shops in New York City, run very largely by Germans. There are very few today. The cabinet-making business has become almost entirely a mill industry. Carriage building is another instance where the occupation is changing from a skilled trade to a factory industry. Blacksmithing and carpentry in the old sense are becoming of much less importance. Of course, on the other hand, there are many others which are increasing rapidly; the whole field of electric manufacture, printing, construction in iron and steel, and so on.

“Is the occupation overcrowded, or is there a scarcity of workers, particularly of high-grade workers? Of course, this point means a great deal in regard to opportunity. Jewelry making, for instance,

appears to be a very desirable trade. And yet, when we look into it, we find there is generally a scarcity not only of high-grade workers in jewelry, but of ordinary workers, the reason being that jewelry to a considerable extent is a seasonal trade. We find that in trades like engraving there is always a scarcity of high-grade workers, owing to the very long period of training required.

“Is the occupation stable, or is it tending to frequent change? I have already touched upon the changing nature of our industries today. Cooperage, for instance, only a few years ago was a matter entirely of handwork. Today barrels are not made by hand. Their manufacture has become entirely a matter of machinery, almost automatic in its character. Millinery and the making of dress and fur goods are constantly changing in the methods and character of work.

“The hours per day enter into the situation. Also the question of whether overtime is a large feature, as it is in many trades in this city, notably in the clothing trade.

“Is the payment by time-work or piece-work? Is the trade seasonal or steady? This last consideration, of course, affects many of the trades, especially the trades of the large cities, the great metropolitan centers, and is affecting us here, especially in the whole field of the clothing trades.

“The next point—the different grades or kinds of work represented in an occupation. That is the thing that some day or other we have got to know very much more about than we know today. We roughly

classify occupations as we look at them. We think of machine work as a high-grade occupation, representing one of the highest degrees of skill, one of the most desirable occupations, paying very good wages. But machine work today is not an occupation representing one kind of work. It is an occupation or industry tremendously subdivided, so that there are grades and grades of work, and in almost any machine-operated establishment there are today comparatively few high-grade and high-paid workers, and a large number of comparatively low-paid and low-grade workers. This set of facts is going to be one of the hardest for us to obtain to the point that they become common knowledge and that we may understand the economic opportunities of an industry in a more discriminating fashion than we can today.

“Shoe manufacture is one of the classical instances of a subdivided industry. There are, they say, about one hundred and one different operations through which the shoe passes, and there are consequently one hundred and one different branches and grades of workers in the shoe-manufacturing industry. A department store represents another grade of vocation tremendously subdivided. We must know the names of these different branches, the kind of work that is performed in each, and the average wages paid in it. We ought to know something about the relative numbers that are in the different lines of work, to be able to judge how much is represented by the high-grade and desirable positions, and how much by the undesirable.

“And in this connection we need to know some-

thing that we know very little about today, we need to know the qualities that are necessary for success in a particular occupation; whether strength and endurance are the things that are needed, whether intelligence, mental alertness, quickness, accuracy, dexterity of hand, nimbleness and carefulness, or artistic feeling are demanded; what, in other words, are the things that mean success and efficiency.

Physical Data on Occupations.—"As to the physical and hygienic conditions of the occupation: The question whether the work is performed inside or outside of doors is an important item. The building trades and the work of transportation represent, of course, outside work, as compared with the great bulk of the work today which are performed inside factories and stores, and which are sedentary in their nature.

"Does the worker sit or stand for long periods without shifting, or does the work involve moving about? In this connection often arises the question whether the strength and health of a particular individual are adjusted to things like clerical work, things like brush-making, which involve sitting at the bench continually.

"Is the occupation conducted in close, crowded, or basement rooms, or in airy, well-ventilated rooms with windows? No one who is not well fortified by health and strength can continue in that condition very long and maintain health and strength when working under the conditions in which at least part of the clothing and machine-operating trades in this city are conducted, where the work is often performed in very crowded and in very close quarters.

"Does the work involve exposure to heat, or cold, or sudden changes in temperature? Of course, the question of laundries and many industrial operations comes in there.

"Is time allowed for dinner? Are there opportunities for obtaining warm meals? Does the work involve eye strain? And does the work involve severe nervous strain?

"Does the work involve special dangers from machinery? Of course, our factory laws today are increasingly taking care of this point, and there is less cause for anxiety. And yet, even today, there still exist marked dangers from machinery in certain trades, as in rubber mills, where the rolls constitute a great danger, and in sawmills, as well as in rolling mills for iron and steel.

"Is the work carried on in an atmosphere with much dust in it? Flour mills and grinding and polishing establishments, of course, represent dangerous possibilities in this direction, although especially in flour mills, the dust is being taken care of and removed by machinery in a way that was unthought of a few years ago.

"Are there special unhealthy conditions, such as constant wetting of hands or contact with poisonous materials, such as lead paint? The number of unhealthy employments is much smaller today than in former times, but the report of the Illinois State Commission on Occupational Diseases indicates how serious are the dangers in this direction.

Influence of the Occupation upon the Workers.—

"This consideration is a matter that we are only

beginning to think of these last few years. Is the occupation stimulating to growth or is it deadening in its effect? Is the worker surrounded by conditions that are stimulating to ambition, stimulating to mental alertness, or are the conditions such that he stands still? Is the task monotonous and dreary, or is it something which is quickening and educating in its daily influence? Of course, the whole field of industry shows great differences in this respect. Trades like printing and high-grade machine work present stimulating, quickening influences. Many other occupations where the work involves simply the feeding of an automatic machine—like many of the stamping factories; some of the lower-grade work in the textile mills, especially in cotton mills; candy dipping; and paper-box making—of course, represent the other extreme. I think we are probably going to think more and more of this point as we continue to study occupations, and to see whether the conditions present influences favorable or unfavorable for the growth of the worker."

Attitude of Proprietors and Managers.—The outside investigator who wishes to study an occupation, or a business or manufacture, as a local example of an occupation, must win the co-operation of the proprietor, manager, or superintendent. Happily it may be said, however, that business men and industrial managers are becoming more and more responsive to the public desire for information concerning occupations, and more and more willing to open the doors of business, shop, and factory to the honest and impartial student of working conditions.

Industrial or other surveys may, of course, be made privately, but more often in recent years they have been made by organizations, such as a vocation bureau, representatives of local school system, or a chamber of commerce. Among others, notable studies have been conducted by the Carnegie Foundation and the Russell Sage Foundation, of New York, the Chicago Chamber of Commerce, and the National Society for the Promotion of Industrial Education.

Minneapolis Occupational Survey—Clothing.—One of these studies may be mentioned as an example, the "Vocational Education Survey of Minneapolis," made by the National Society for the Promotion of Industrial Education. This survey, like that conducted in Richmond, Va., and others, was made "for the purpose of analyzing the local industries and the local systems of education, and of ascertaining what kind of instruction is needed, and the best way of imparting that instruction." Thus the leaders in industry are coming to make the effort to determine the education of the worker, especially in the great industrial centers of this country and of the world.

Following is an extract from the report of the Minneapolis Survey, on "Cutting." The report forms part of a study that was made of the garment-making industry:

Cutting is the most important and responsible work in the manufacture of ready-made clothing. It demands accuracy in measurements and ability to lay out different garments so as to save material, for an inch saved on each one of the hundreds of garments turned out represents much money. As the head cutter is usually a designer, a thorough knowl-

edge of style and of the lines of the garment, and planning the garment to suit the cloth are important, demanding training and long experience.

Cutting comprises designing, spreading, marking, and actual cutting. These are done by separate workers, the cutter doing them all only in shops which handle small quantities of work.

The spreader lays the cloth in piles ready for the cutter. He is usually a learner, or apprentice, acting as assistant to the cutter. He spreads the cloth on the table, layer after layer of the same length, according to estimates worked out by the designer, or head cutter, until as many pieces as needed have been piled up. Sometimes only one kind of cloth is used, but frequently the spreads are of different colors or kinds of material. The spreader smoothes out the wrinkles, keeps the stretch of all piles uniform, and sees that edges are carefully laid together.

Spreads that are laid too closely cannot be cut satisfactorily, and the garments will vary, while those stretched too much tend to be undersized when made up. One spread may contain several garments, determined largely by the length of the table and the number of garments to be cut. Factories, as a rule, prefer a long table, so that many garments may be cut from one spread, thus reducing waste.

When the spreading is done, an assistant lays the pattern on the cloth as diagramed by the head cutter. He marks around each piece with chalk or pencil, and repeats the process till the entire surface of the top spread has been used. The pattern is then removed, and the work is ready for the cutter. Marking is less responsible work than designing or spreading, for the worker handles only the top piece of cloth, and, if not properly done, the chalk may be brushed off. The same assistant may assemble the parts of the garments after cutting, and put them in bundles ready for the

workroom. The young man wishing to become a skilled cutter gets his first idea of the requirements through this work.

The cutter, who is a full-fledged mechanic, does the actual work of cutting. He uses a hand knife or the electric cutting knife, and follows the chalk or pencil lines closely. To cut a number of layers requires strength, a steady hand, a good eye, and knowledge of all parts of a garment. It involves considerable responsibility, as careless or inefficient work may mean the loss of large quantities of valuable cloth.

The cutter must know the kinds, qualities, and variations of goods, and width and shrinkage. He must be able to design patterns, plan the layout on the cloth, draw a diagram of the same for reference, and figure estimates so as to get the greatest number of garments out of the cloth. These estimates, as a rule, are carefully checked before a style is decided upon. He must know how to lay the spread, mark the cloth, match stripes or designs, use the hand and the electric cutting knife skilfully, and grade patterns to stock sizes.

The educational requirements are a fair knowledge of reading, writing, and arithmetic—through fractions—sufficient to figure yardage and estimates dealing with both length and width of cloth, and a knowledge of drafting, involving some mathematical principles. Since the spreader and the marker are in a sense apprentices to the cutter, they should have the capacity to learn the cutter's work. The requirements, therefore, differ in degree rather than in kind. The marker and the spreader may be 18 to 20 years old. They rarely become head cutters under at least four or five years' experience, though two years is considered the term of apprenticeship.

Since the cutter stands practically all the time, and bends over his work, he should have good health and endurance.

He should also have good eyesight and a steady hand in the use of the knife.

Richmond Occupational Survey—Metal Trades.—

The Richmond Survey, made by the National Society for the Promotion of Industrial Education, affords an excellent and comprehensive example of an analysis of the occupations, in the report on "Findings about Occupations," in the leading local divisions of industry in Richmond, Va.

The chart made by the Survey giving the findings in the metal trades in Richmond, is unusually comprehensive. The full chart covers the following occupations: Puddler, heater, roller, wood pattern-maker, metal patternmaker, iron molder, brass molder, core maker, machinist, blacksmith, boiler maker, tinsmith and sheet-metal worker, riveter and buckler, pipe fitter, car repairer, railway car painter, and machine wood-worker in car shops.

The findings about all these trades need not be reproduced here, but three complete analysis are given on the following pages to indicate the nature of the survey, and to act as a guide in the construction of similar analysis for other industries. It should be understood that the analysis presented only apply to conditions in Richmond at the time of the survey.

Personnel Manager's Task.—For the general investigator the study of the vocations involves the difficulty arising from their great number and their steadily increasing subdivisions. In the "Index to Occupations," recently issued by the Department of Commerce of the United States Bureau of the Census,

FINDINGS ABOUT OCCUPATIONS IN THE METAL TRADES IN RICHMOND, VA.*

ANALYSIS OUTLINE	WOOD PATTERN MAKER	IRON MOLDER	MACHINIST
1. Process	Where necessary full-size drawings from blue prints are prepared. Well-seasoned wood of best grade is selected—hard or soft, depending on the number of castings required. Parts, shaped by hand and machine tools, are assembled, with regard to draft or taper, leaving pieces loose to facilitate drawing from mold. Assembled parts are sandpapered and shel-lacked. In making core boxes, where these are required, similar processes are involved. Accurate construction of pattern and core box is necessary to insure proper thickness of metal in casting.	Placing pattern on follow board in flask; distributing facing sand over pattern; filling flask with unriddled sand; ramming, rolling over flask, and dressing face; placing cope on drag; distributing facing sand; placing gate and riser pins, and filling and ramming cope; making vents to carry off gases; placing cover board, rolling over cope, and finishing face; withdrawing gate and riser pins; cutting groove from gate on drag; pattern; replacing cope on drag; clamping, pouring in molten metal, and after cooling turning casting out of flask to be sent to casting shed for cleaning.	Finishing castings and forgings to size, and erecting and repairing machinery. Bench or vise work, machine work, and floor work are involved in these processes, which include chipping, filing, drilling, tapping, reaming, turning, facing, boring, planing, cutting gears, and scraping bearings. The all-round machinist is skilled in the use of portable and hand tool and in the operation of lathes, drill presses, reamers, planers, shapers, vertical and horizontal boring mills, gear-cutting, and other special machines. Scraping bearings, assembling parts, and erecting are floor-work processes, except in the case of light machines, which are assembled at the bench.
2. Product or specialties....	Patterns of wood from which castings are made.	Castings of iron.....	Varied: Includes locomotives, sugar and cotton machinery, cigarette machines, shot and shell, novelties, and general repair work.
3. Importance of trade (number employed).	About 50 journeymen and apprentices.	About 300 journeymen and apprentices.	About 1,150 journeymen and apprentices.
4. Conditions of employment: (a) That involve physical or nervous strain.	None	Continual bending and lifting causes backache and physical strain.	Heavy lifting in some classes of work.
(b) That stimulate intelligence and interest.	Variety of problems presented by the best class of work.	Diversity of processes and variety in high-class molding.	Frequent change of work and the requirements of certain classes of work; for example, the construction of complicated machinery and the making of precision instruments, such as dies for drop-forging, stimulate interest.

5. Wages:			
Apprentices—			
(a) Beginning wage.....	\$4 to \$7.26 per week.....	\$3 to \$8 per week.....	\$3 to \$7.26 per week.....
(b) Second-year wage.....	\$5 to \$8.57 per week.....	\$4 to \$10 per week.....	\$4 to \$8.57 per week.....
(c) Third-year wage.....	\$6 to \$9.45 per week.....	\$5 to \$12 per week.....	\$5 to \$9.45 per week.....
(d) Fourth-year wage.....	\$7 to \$11.09 per week.....	\$6 to \$14 per week.....	\$6 to \$11.09 per week.....
Journeyman—			
(e) Minimum wage.....	\$18 per week.....	\$18.50 per week.....	25 cents per hour.....
(f) Maximum wage.....	\$22.50 per week.....	\$30 per week.....	41 cents per hour.....
(g) Union scale.....	40 cents per hour.....	Machine molding, daywork, 35.7 cents per hour; piece-work, minimum, 46.7 cents per hour; stove molding, 50 cents per hour.	Minimum, 25 cents per hour....
6. Hours of Labor (regular, per day; per week, on Saturday).	10 hours per day; 55 hours per week; 6 hours on Saturday.	Machine molders: 9 hours per day; 50 hours per week, 5 hours on Saturday.	8 to 10 hours per day; 48 to 60 hours per week; 8 to 10 hours on Saturday; 48 to 60 hours on shop week; 8½ hours 5 days and 5½ hours on Saturday.
7. Seasonal activity:			
(a) Busy season.....	No seasonal period of activity..	April to December, inclusive....	No seasonal period of activity..
(b) Slack season.....	No seasonal slack period.....	January to March, inclusive.....	No seasonal slack period.....
(c) Fluctuation in employment.....	Very considerable but irregular..	Considerable fluctuation in amount of work, but equal division of work among men in union shops.	Practically none.....
8. Extent to which the trade is organized.	About three-fourths.....	About three-fourths.....	About three-fifths.....
9. Entrance age.....	16 to 18 years.....	16 to 18 years.....	15 to 17 years.....
10. Years required to learn trade.....	4 years.....	4 years.....	4 years.....
11. Age of maximum productivity.....	25 to 55 years of age.....	22 to 45 years of age.....	25 to 55 years of age.....
12. Is supply of labor adequate to meet demand? (Cause of deficiency, if any.)	Adequate.....	Adequate.....	Adequate.....
13. Is demand for labor increasing or decreasing?	Stationary.....	Stationary.....	Increasing for highly skilled workers and for machine specialists.
14. What is the source of supply?	Apprentices.....	Apprentices, recruited from the lower grammar grades.	Apprentices and, to a limited extent, drifting machinists.

* From the report of the National Society for the Promotion of Industrial Education.

there are listed about 9000 occupational designations, based upon 428 occupations and occupation groups.

The personnel manager, however, has only the jobs in his own business or factory to master, no matter how much he may know about the work of other establishments. The separate jobs with which he is concerned may be few or many. If comparatively few, as in the wholesale leather house, he may be familiar with the nature and requirements of each, so that he may hire an employee upon his own knowledge and judgment of the position involved. If the different kinds of work be many, as in the modern shoe factory or textile mill, the manager must rely upon information secured from assistants in his department, or even upon information gained from other departments, to obtain a working knowledge of each position. For this reason, the practice of having the foreman hire and discharge has so long persisted. When, however, system is introduced, under one expert head, and every job is charted, that head may act for all departments, for the good of the entire concern.

The Research Department.—Some modern employers have established "Research Departments," whose function is to study and chart the various positions in a firm or factory. Such a department determines exactly the nature and duties of each position, its requirements for beginning, both mental and physical, its pay at beginning and later on, its opportunities with respect to advancement, and other such facts as may be necessary to a right handling of the employment problem. The management of a de-

partment like this frequently analyze not only the position, but the efficiency of the person filling it at any time, and use the information thus gathered as a basis upon which to judge whether that person shall be retained where he is, shifted, or promoted. Thus, in a sense, the qualities and abilities of all the employees of a concern may be recorded in the employment office.

In a very large establishment, which will employ thousands of workers, the employment manager needs the help of a research department, either in actual form or in substance. The facts and conditions that such a department can disclose are essential to him if he is to render his best service to his firm and to the body of employees.

Instructions to an Employment Department.—An evidence of this comparatively recent tendency of large concerns to study the job and the employee, is given by Mr. Roy W. Kelley in "Hiring the Worker," an article that appeared in "Industrial Management." An "Outline of Instructions to the Employment Department in a Paper Mill", presented by Mr. Kelley, reads in part as follows:

1. Office is open 8:00 a. m.—9:00 a. m.; 1:30 p. m.—2:00 p. m.; 5:00 p. m.—5:30 p. m.
2. Department Head shall be especially responsible for:
 - (a) Employment of all help,
 - (b) Accurate record of each employee, showing dates of employment, transfers, promotions, when dropped, and department and performance,
 - (c) Interviewing all applicants and sending the best to superintendent and foremen on approval.

(d) Keeping in touch with good men not now available or particularly needed,

(e) Following up accidents, promotions, transfers, and all other conditions affecting employees,

(f) Aid to every employee in advancement. Recommendations for understudy,

(g) Dissemination of proper information among employees, concerning all company activities. (Internal publicity.)

3. Obtain from Superintendents and Foremen general and specific reports on employees. Also, at stated intervals hold conference on subjects with them. By these means, lists should be made of men who deserve advancement, men who should be transferred, men who are drinkers (graded), men who are unfit. Reports of men in outside mills every six months.

4. Aid in adjusting differences. See that any dissatisfaction is brought to the attention of the Manager.

5. Maintain list of all positions, showing qualifications for each, and types of worker best suited for the same.

The Worker's Viewpoint.—Further, in the gathering of information about work, the point of view of the worker himself must be considered. That information must include his contribution to the analysis of his job. In conducting a study of the personnel problem in a certain well-known establishment, I prepared a list of questions for each employee to answer, concerning his work. An explanation of the purpose of the study was made beforehand in order to enlist the co-operation of the people in the establishment. Special emphasis was laid on the desire “to define fairly what the work of each employee actually is, and, in so doing, to provide a clear

basis for fair dealings, good service, and just compensation.”

Through an analysis of the duties that the employee has to perform under modern conditions, the employer is coming to have a higher sense of appreciation of the service of the worker, of what is due him, and of what is to be expected of him. And this awakening of the employer is a factor that will be of the greatest value in the solution of the employment problem. A right adjustment of the worker to the work follows. In the nature of the job lie its proper handling and solution.

CHAPTER VI

CONDITIONS AFFECTING WORK AND THE WORKING FORCE.

Output and Labor.—Output, the matter of greatest concern to every executive, foreman, engineer, and employer, was never studied more painstakingly by governments than it was immediately after the beginning of the great European war. The reason was obvious. Never was the question of sheer output fraught with greater significance to the fighting nations. The national existence of all the allied nations depended upon output. Caught unprepared by a foe who had made a particular kind of output his life-long object, the Allies were obliged to produce storehouses of ammunition and general supplies to match those Germany had been piling up for over thirty years. Output, at once the lowest and the highest test, the most material and the most patriotic, was then perforce the national standard by which to judge all conditions affecting the work and the working force of the colossal munition factories.

Industrial fatigue, occupational diseases, factory accidents, sickness and injury, plant and personal hygiene, ceased to be mere academic matters and the anxiety of the few, and became the common concern of all. The English Government, in the heat of the

war, was obliged to pause long enough to appoint a highly representative group of experts to consider all questions of industrial fatigue, hours of labor, and other matters affecting the personal health, and therefore the physical efficiency, of employees in munition factories and workshops. The remarkable studies of this group of industrial experts were republished by the United States Council of National Defense, in the hope that they might popularize the costly experiences of England and her allies "in dealing with labor in the production of the largest quantity of munitions in the shortest space of time."

With the same object in mind, I have based this chapter on these English records,* because I am convinced that the sound industrial counsel and good business judgment embodied therein are of the greatest value not only to England but to America, and not only in war times but in times of peace.

Industrial Fatigue.—Fatigue as a factor in industry is by no means commonly understood, much less appreciated, even by men of high position, like executives and engineers. This is probably due to the fact that it is an internal industrial handicap that is not as obvious as a broken finger. Industrial fatigue, in essence, means a diminished capacity for work. From the standpoint of production, it is especially important to realize that this diminished capacity occurs before the worker himself experiences the actual sensation of fatigue. Industrial fatigue is eventually "felt" in the brain, the nerves, and the

* See "Hours, Fatigue and Health in British Munition Factories," U. S. Dept. of Labor No. 221.

muscles, and when this point is reached, the worker is drawing on his inner reserve—he is consuming his own substance. But when fatigue is in its first stages, the worker is storing up poisonous products generated by the chemical changes caused by his exertions.

Industrial fatigue is due to overstrain incurred in industry. Speed, noise, piece-work, overtime, are some of the causes of fatigue. Monotony, too, causes fatigue. The strain that machinery undergoes is one of the most important elements in fatigue. This is due to the rhythm of the machine. For every machine or set of machines, indeed, every plant has its peculiar motion or rhythm, like the clock, or the running train, or the tramp, tramp of the marching troop. The human machine also has this rhythm.

Miss Josephine Goldmark, an expert on this subject, says, "It is not a fanciful or theoretical notion, but the common endowment in all of us."* "Human" engineers will have to learn that industrial rhythm is the secret of output. It is because the rhythm of the machine is faster than the rhythm of the operator that industrial fatigue finally sets in. "Hustling," or speeding up, may enable the worker to catch up with the fast machine, but only to break down sooner or later. "If the balance between the two could be permanently established, fatigue could never occur." Where this balance is impossible, rest periods are essential if fatigue is to be forestalled.

* "Fatigue and Efficiency", p. 81.

Bodily Fatigue.—The whole of the mechanical energy and heat yielded by the body that is doing work, comes from the chemical energy stored in the muscles. As this store of energy is used up, the deficiency must be made good by fresh supplies from the blood, and ultimately from food. Hence the importance of the diet of workers, now ignored by all except a handful of enlightened employers. But next to food in importance is the rest period, the management of which is certainly within the control of every employer. We are learning that the maximum output in addition to the day's work, and the continued health of the worker, are best secured by spells of strenuous activity broken by spells of rest. The longer the rest spells, the less the bodily fatigue.

Nervous and Mental Fatigue.—Either steady attention concentrated upon one skilled task, or distributed attention scattered over several tasks, will bring on nervous and mental fatigue. So will the continued use of special senses. Nervous fatigue comes also from work of a "fussy" kind. Much industrial work is monotonous today; it therefore becomes automatic, but the sense of monotony itself tends to diminish the capacity for work, just as "interest" may improve it. Two things, therefore, employers and employees must learn concerning the science of industrial fatigue:

1. It overtakes the worker before he realizes it himself, and diminishes his capacity for output for the time being.
2. Advanced fatigue not only reduces his capacity for the moment, but does him damage of a more permanent kind, which will affect his capacity in the future.

Plainly, it is uneconomical to allow this damage to be done. It is therefore of great importance to determine and put into operation the tests of industrial fatigue.

Fatigue and Output.—It is of special interest to the human engineer, whether he be employer, foreman, or any other type of executive, that output itself, or production, is the best test of fatigue. Measurement of output per hour proves this point beyond the shadow of a doubt. These measurements are gradually convincing employers that the “eleventh hour,” particularly in all strenuous industries, is unproductive and therefore uneconomical. The opposition to the idea of shortening the working day, in order to lessen the strains of industry, is therefore dying out. As employers begin to understand the effects of overstrain on output, they cease to encourage the outcry that shorter hours will ruin our industries, however honest the conviction may have been in the past. The testimony, both in this country and abroad, conclusively shows that the shorter day increases output. Early in the 19th century, in England, Lord Shaftesbury and Robert Owen affirmed, as a result of tests, that in proportion as the hours of labor were reduced, the amount of spoiled work promptly decreased and output increased. They found:

Not only that production deteriorated in amount and quality during the last two exhausting hours of the twelve-hour day, but that the workers’ total efficiency, their physical and moral powers, all were gradually impaired. The shorter day, on the contrary, released them before exhaustion

arrived, and, in the long run, tended to preserve working capacity at a higher level.

In the United States, the theory of larger output and shorter hours was also supported by the best economists, and later was embodied in legislation. The proposition was first advanced in the interest of working children as early as 1825, in Massachusetts, and in the interest of adult women in 1874. After the ten-hour law went into effect in Massachusetts, Mr. Carroll D. Wright investigated its effect on production. He found that the increased efficiency of the worker more than made up for the eleventh hour, which was then for the first time legislated out of existence in industry, so far as women and children were concerned. This investigation had an important effect on the ultimate adoption of the ten-hour day in other states. The argument, therefore, that industry must leave the state or be ruined, wore itself out in time in the face of the facts.

In the meantime, studies of output materially aided the fight against fatigue in industry. These studies are still going forward, and in the factories of both Europe and America, the evidence fully corroborates the earlier conclusions, to wit:

The practice, or "limbering up," gained during the first hour of work makes the second, and sometimes the third hour also, the period of maximum production. In all cases, the lowest output of the morning is reached during the hour before the noon rest. Output rises again markedly in the first hour of work after the noon rest, but it declines much more rapidly in the afternoon than in the morning. In no

case does the afternoon output equal the morning's output in amount.*

Other studies show, further, that output varies with the health of the individual, as well as with the advancing hour. Careful selection of individuals for particular tasks is now the rule in well-managed plants that seek to profit by these studies of the human element in industry. In such plants, executives are chosen for their ability to lead rather than drive men, because it has been found that the workers' co-operation with the employing management, and their highest voluntary efforts to achieve the maximum output, can be secured only through their good will. Unscientific managers apparently fail to understand that the law of good will, whether in industry or in society, is as real as any other law, and that, moreover, it has physical basis. Wherever, in the interest of gain, the law has been disobeyed, it has reasserted itself in the form of "slowed labor," as a kind of physiological self-protection. The frequent charge, therefore, that workers are deliberately limiting their output, or "slacking," may be true in the sense that they are by nature compelled to slow up effort that formerly had to last them twelve or thirteen hours a day. If that is so, it will take some time before the maximum output will be demonstrated within reasonably shorter working hours.

Fighting Off Fatigue; Hours of Work.—The eight-hour day, the theory of which has heretofore been much misunderstood, thus acquires new meaning to

* "Fatigue and Efficiency," by Josephine Goldmark, p. 136.

those who look upon it as a method of increasing, rather than decreasing, the output. Shortening the working day, in other words, may be another method of fighting fatigue. England, compelled to consider the hours of work purely from the standpoint of maximum output, came to the conclusion that it is better to have a reasonably short day than a long one, and a system of shifts rather than excessive overtime. Note the fact that overtime was resorted to in preference to the three-shift system, because of the dearth of workers and the difficulties of increasing the size of the plant. Since the most highly skilled workers were most scarce, they had been the greatest victims of excessive overtime. In the early days of the war, men worked as much as ninety hours a week. The objections to overtime may be briefly stated as follows:

It imposes a very serious strain upon the management, the executive staff, and the foremen, both on account of the actual length of the hours worked and on account of the increased worry and anxiety to maintain output and quality of work. These men cannot take days off duty like the ordinary workers.

It is liable to curtail unduly the period of rest and sleep available for those who have to travel long distances to and from their work, a matter of special importance in the case of young workers.

The fatigue entailed increases the temptation to men to indulge in the consumption of alcohol; they are too tired to eat, and therefore seek a stimulant.

For the rank and file in England, the working day has been gradually reduced to meet the needs

of three distinct groups; adult males, women and girls, and boys. Each group still works longer hours, on the average, than it does in this country. But our interest here lies in the fact that for each group the reduction has been considerable, and yet in the interest of maximum output, or as a means of fighting fatigue.

Shifts.—In England, the system of three shifts of eight hours each is expressly favored in the interest of the women, while the double shift, or day and night shift, is still resorted to in the case of men, very largely because of a shortage of man power. Boys, like men, are generally employed on twelve-hour shifts, but the British Committee, in the report referred to, were hoping to limit the practice. Furthermore, the Committee, while preferring shifts to overtime, set forth the following objections to night work:

a. It is uneconomical. Though wages are paid at a higher rate, the rate of output, more particularly during the last two or three hours of the twelve-hour shift, is generally lower. The Committee feel that this objection would be largely overcome by the workers being afforded an opportunity to obtain suitable refreshment about 4 a. m.

b. Supervision is frequently unsatisfactory. This is chiefly due to the fact that not infrequently fewer and less experienced foremen are employed at night.

c. Conditions of lighting are seldom so good as in daytime, and make fine work more difficult.

d. Workers experience great difficulty in sleeping by day, partly because of the dislocation of the ordinary habits of life, and partly because of the noises and disturbances which

are almost inevitable in the daytime, except under specially favorable conditions.

e. The unfamiliar meal hours make it difficult for the workers to consume substantial food, and their digestion is liable to become deranged.

To mitigate the evil of night work the practice is to make it irregular rather than a regular thing. Weekly, fortnightly, and monthly changes are made. The weekly change is the most common.

Another method of fighting fatigue in England is the system of spells and breaks. Where work commences at 6 A. M., the ordinary breaks are half an hour for breakfast and one hour for dinner. A tea interval is usually allowed for men who are working overtime. Women workers are frequently allowed short intervals in the morning, or in the afternoon, or at both times. It seems to be generally agreed that women cannot profitably work long spells without any breaks or refreshment. The Committee also considered it most important that the ordinary factory holiday should not be interfered with. They favored definite breaks, in long periods, and favorable opportunity for recuperation. They further advocated providing adequate traveling accommodation for conveying large numbers of workers to convenient health resorts and holiday centers.

Sunday Labor.—The question of Sunday labor also has a fundamental bearing on industrial fatigue. It is considered here not in its religious but in its health aspect. The British Committee expressed themselves squarely against Sunday labor. But the practice of Sunday work is so common that it is hard to break

it off. Sunday labor seems to be in favor because of the high rate of wages, but employers and trade-union officials alike disapprove the practice. The Committee regarded continued work as a profound mistake. "It does not pay; output is not increased." They would therefore confine Sunday work to cases of emergency. "Sunday labor is a serious evil. It should be steadily and systematically discouraged and restricted." Pending a discontinuance of Sunday labor the following improvements are urged:

- a. Close Saturday night prior to working Sunday.
- b. Omit one or two shifts on Sunday.
- c. Reduce the hours of work on Sunday.

In view of the democratic makeup of the Committee, the statement is significant that, in their opinion, and contrary to impressions in this country, the foremen and the higher management even more certainly require definite periods of rest.

These individuals have never spared themselves. They carry a heavy burden of responsibility and they cannot be replaced. The Committee have with regret noted among them obvious signs of overwork. It is of primary importance in the interest of the nation that they should be allowed that rest which is essential to the maintenance of their work.

Industrial Accidents.—Executives are beginning to realize that the human element is often a prime factor in connection with industrial accidents. Heretofore attention has centered very largely on mechanical causes of accidents, the machine itself, its speed, its unguarded state, its strappings. We are learning, however, that the conditions affecting the worker are

as important as the conditions affecting the work, and that human as well as mechanical causes are responsible for industrial accidents. The human causes are less obvious, because they are internal, but they are none the less swift and fatal in their operation. The failure to realize that a tired worker off his guard is as potent a factor in industrial accidents as the unguarded machine, not only to himself but to his fellow-workers, is best illustrated in the case of industrial injuries.

An external injury promptly gets attention. Internal injuries, because unseen, are neglected by both employee and employer. Indeed, the worker often has difficulty to convince anybody in the plant that there is something the matter with him. It is so much easier to accuse him of laziness. The same thing is true of industrial accidents. The average factory inspector will order expensive plant improvements in order to avoid future accidents, but he hasn't even the power to send home the tired woman whose fatigue may have caused the accident. Moreover, workers themselves eventually become hardened to dangers. Even in the fields of danger familiarity breeds contempt, certainly a disregard of the most obvious safety rules.

Hence the significance of "safety first" campaigns, which are becoming more popular from day to day. These campaigns educate both employer and employee, develop a greater sense of responsibility, and discourage the tendency to "take a chance." Much thought is now being given by enlightened employers to methods of adequately protecting employees who

may be exposed to the possibilities of serious injury from accident.

General safety provisions in industry are now commonly provided for by legislation. For example, the number of accidents from falls or falling material, so common in building operations of all kinds, has been reduced as a result of stringent legislation with respect to safety railings, scaffolding, flooring, ladders, and so on. The erection and use of hoisting machines or engines are carefully regulated. Workmen and mechanics are no longer allowed to ride on material that is being hoisted up in the air by chains, ropes, or cables.

Accidents in munition factories, in particular, are receiving special attention, because the workers' eyesight is so often affected. Authorities are unanimous in the opinion that such accidents are largely preventable. These accidents are mainly caused by flying particles of metal, which enter the eye. While in the majority of cases the results are not serious, there is a certain proportion of accidents in which infection causes permanent injury.

The wearing of goggles, though objected to by the workers, has for a long time been urged as a safeguard, and when an accident does occur, immediate skilful treatment is of the utmost importance in all cases. Account must also be taken of the time lost and the temporary inconvenience suffered from a much larger number of slight causes, which may incapacitate the sufferer for only a short period, perhaps half a day. In so far as immediate reduction of output is concerned, however, these slight

causes have probably a greater effect than the more serious injuries.

In certain states, laws requiring compensation for industrial accidents is obliging firms to pay very particular attention to all causes of accidents, including fatigue. They find it cheaper to prevent accidents than to pay for them; cheaper to fence around the cliff above, than to keep the ambulance busy below.

Occupational Diseases.—Occupational diseases in munition factories come from exposure to lead fumes, explosives, and so on. Exposure to lead dust and fumes is now being recognized as of the greatest danger. Lead dust, once inhaled, tends to accumulate in the body and set up chronic poisoning. The British Committee commented as follows upon the symptoms of lead poisoning:

The existence of a blue line at the edge of the gums is an indication of lead absorption, and headache, colic, constipation, and marked paleness are early manifestations of poisoning.

The inhaling of lead fumes can be prevented by keeping lead material damp and in other ways eliminating the lead dust or fumes. The use of exhausts is advocated wherever lead fumes are bound to escape. To prevent lead from entering the system the British Committee advised against smoking while at work and eating in the work room, and urged the necessity for special washing facilities. The Committee also strongly recommended that workers should not commence work without having taken

food, for evidence shows that hungry and ill-fed workers succumb to industrial poisons more readily than others.

Such workers should be supplied with at least one-half pint of milk or cocoa before starting work in the morning. This plan has been followed with excellent results for many in munition factories where there is danger of lead poisoning.

Other diseases peculiar to munition workers—skin diseases, lung diseases, and so on, are also fully discussed by the British Committee. But special attention is given to the effects of eye diseases:

Many conditions likely to cause temporary or permanent damage to the eyesight of munition workers are admittedly preventable, while the prompt and effective treatment of the injury when it has occurred will reduce suffering, hasten recovery, and lessen the chance of permanent injury.

Industrial Sickness.—To what extent is sickness due to industrial occupations? Examination of this question began as early as the seventeenth century. In England, in 1831, a long series of medical investigations showed that "the environment and conditions of factory life were closely associated with exceptional disablements, diseases, and mortality among the persons employed." Actuaries confirmed these reports by extensive studies of life-insurance tables. Moreover, these parallel studies showed that the rate of sickness and mortality varies with the character of the occupation and that occupational diseases are preventable. These facts become most clearly evident from a study of the causes of industrial sickness, such as overwork and night work, cramped atti-

tudes and postures, excessive muscular strain, accidents, bad air, dust and fumes, and so on. These causes, operating separately and jointly, affect the lungs, the heart, the digestive organs, the nervous system, and the muscular system. Each or all may be affected with results harmful both to industrial efficiency and output and the personal health and expectation of life. Once an unhealthy condition of these organs and tissues has been brought about, it ultimately disables a worker as effectively as a knock-out blow.

While the executive or foreman does not possess the medical training that would enable him to ascertain the health conditions of the worker, nevertheless he ought to be guided by certain outward signs and indications certain to challenge his attention first. These indications of sickness are frequent absence from work, loud coughing, listlessness, and so on. In other words, the foreman, like the parent, ought to recognize these outward signs of ill health. Children are now generally examined at least once a year. There is at present, however, no method by which workers in factories are examined regularly, and therefore there is no means of detecting and preventing ill health and decreased output.

Prevention and Treatment.—The first step in prevention is to give all applicants for work a medical examination. Well-managed plants testify that this preliminary medical examination is now the usual practice, and that it has been found of great advantage. Some factories have also instituted a periodical medical inspection, in order to detect the conditions of

ill health that may arise after the workers have been hired. These inspections invite attention to unfavorable conditions which are bound to be remedied by the safeguarding of machinery, ventilation of the work rooms, improvement of sanitation facilities, adoption of safety appliances, regulation of conditions that cause diseases, adequate lighting of the factory, and the more careful cleaning of machinery. So much for prevention.

Medical treatment in the factory calls for both medical and nursing skill. In England, medical attendance is obtainable under the national insurance system. In America, our system of health insurance is just now in the stage of discussion, with Massachusetts and California in the lead. Enlightened factory sanitarians advocate a medical hospital service for the factory, and a nursing service, obtained by the appointment of one or more trained nurses to undertake duties in the factory, for both day and night shifts. In regard to such a system, the British Committee reported as follows:

Such arrangements have been instituted in many munition works, particularly where women are employed, and have proved of great value to employers and workers alike. The duties of a factory nurse may include (a) supervision of the health of the workers, (b) superintendence of the rest room for those who are temporarily indisposed, (c) following up cases of sickness at home, (d) taking charge of first-aid treatment of injuries, and (e) in the absence of medical advice, observing and controlling in its initial stages any threatened outbreak of the influenza type of sickness, which, if it extends, may temporarily paralyze output. Wherever nurses have

been appointed, the Committee have found that the scope of their services has extended in many useful directions and they have no hesitation in recommending such appointments.

Many factories are also provided with a doctor, who either stays at the plant, or who will come at any time on call. The practice is growing in industry. Factory doctors advise that even slight injuries, especially to the eyes, should be attended to by a specialist.

The knowledge and practice of first aid are growing both in England and in this country. In many plants, employees themselves have undergone training in first aid. This training represents the best kind of industrial insurance. The worker who has been taught the "a b c" of first aid can be of service in emergencies not only to himself but to his fellow-workers. There should be a "key" man in each industrial group, or gang, who has had the benefit of a fairly adequate course. This course should include lessons in prevention as well as in treatment, in ventilation, heating, and lighting of the work room, and in fundamental principles of sanitation and safety. The worker who takes the course might also be put in charge of special literature on these subjects, and have the supervision of leaflets and placards of instruction and advice.

Improving the Plant.—In this country, as in England, many factories and workshops are being erected, altered, and enlarged. Are the new conditions, thus created, best calculated to insure the health and output of the workers? Both the plant and the working force will at times be subject to extraordinary

demands, such as overtime and night work, conditions most unfavorable in and of themselves. Are the plants so arranged as to meet not only the minimum of existing factory legislation, but the extraordinary demands of these strenuous industrial times?

Ventilation.—Sufficient ventilation of factories and workshops is essential for the maintenance of the health and comfort, and therefore the efficiency and capacity, of the workers. Ventilation must accomplish two objects:

1. It must provide air which is pure and clean.
2. It must provide an atmosphere which is stimulating and refreshing. That is, the air must be chemically pure and physically comfortable.

Fresh air may be made chemically impure by carbon gases, bacteria, dust, fumes, and other substances that cause the familiar "smell." These impurities vary with the character of the plant, the work, and the working force. The real danger inherent in these impurities is that, while they are felt, they are not seen. Economically, it is cheaper to remove them than to tolerate them. For example, common "colds" are the most potent factors of industrial inefficiency. The lost time and the diminished output for which they are responsible have never been adequately appreciated; these "colds" have generally been communicated by one worker to another, thoughtlessly, as if nobody cared about the results. But now we are beginning to care.

The British Committee demanded the following conditions, which are obtainable through natural or scientific ventilation:

- a. Cool air, rather than hot.
- b. Dry air, rather than damp.
- c. Air varying, rather than uniform and monotonous, in temperature.
- d. Air that is moving rather than still.

Some of the means by which natural ventilation is to be attained are:

- a. Hoods, exhausts, and flues.
- b. Special ventilators or louvers.
- c. Doors, windows, and fans to meet emergencies and abnormal conditions.

Heating.—The Committee advocated radiant heating by means of steam or hot-water pipes. “Gas heated radiators in which the burnt gas escapes into the shop, are not permissible.” The use of warmed air pumped into the shop is also discouraged. The means of ventilating and heating factories should be separate and distinct. Pumping cool air into the plant in summer is different from pumping warmed air in winter, as a means of both heating and ventilation. The Committee called attention to the fact that the best laid plans for ventilating and heating are valueless unless they are carried out with judgment. “If, for example, the windows are shut because it is a cold morning, there is a probability that they will usually not be opened again until the shop is much too hot.” This is due to the fact that no one in particular is in charge. Some responsible person should be specially detailed to attend to this matter. In view of the importance of this question to their own health, the workers should be especially

vigilant. "It is for the management to provide the means and the supervisor. It is for the employee to co-operate."

Lighting.—The proper lighting of the plant is equally important with respect to both the plant output and the health of the workers. The essentials of good lighting are:

- a. Adequacy.
- b. Uniformity and constancy.
- c. Shading of lamps.
- d. Proper placing of lights.

"Natural lighting is to be preferred to artificial lighting, on grounds of health as well as of economy; roof lighting is generally to be preferred to lateral." The Committee advocated the cleaning of windows at regular and frequent intervals—a matter commonly neglected. Dirty windows not only interfere with natural lighting, but appreciably lessen the number of hours during which use may be made of daylight.

The frequent use of artificial lighting due to much night work, is of special importance now. According to the Commission: "Bad lighting affects output unfavorably, not only by making good and rapid work more difficult, but by causing headaches and other effects of eye-strain." Shaded arc lights overhead may cost more than fish-tail gas burners in front of the worker; but the saving that the latter make possible is made only at the expense of the worker. Moreover, the use of gas under pressure, and of incandescent mantels with lamps placed high up, costs no more than the use of fish-tail gas burn-

ers, and yet excellent lighting is secured by means of this method.

I have not attempted to treat in this chapter all conditions affecting work and the working force, but I have endeavored to show that the outstanding conditions contributing primarily to accidents, diseases, fatigue, and inefficiency can no longer be ignored with impunity. The remedies are at hand and the time is ripe for an overhauling of every plant in the land, with a view to eliminating all untoward conditions that stand in the way of maximum health, efficiency, and output.

CHAPTER VII

SELECTION OF EMPLOYEES

Old Methods Discarded.—From ancient times until the present, man's foremost interest, as well as his "proper study," has been man. Human nature is, at best, always so elusive and undefinable that those who are even crudely endowed with a special interest in it, and an unusual faculty of observation, are eagerly listened to.

Phrenology has gone overboard in the advance of modern science. To pick men for jobs by the cut of their faces, color of their hair, or other such superficial means, is a delightful, "labor-saving" method, but any organization which attempts to build up a working force by anything less than a careful, intelligent and painstaking procedure will both render itself ridiculous and come to grief.

Detroit Steel Products Company's Plan.—The employer who respects his common sense then, must take the longer route in planning a scheme for the selection of employees. Obviously, men well-chosen make an organization, and in this discussion no better course can be followed than to consider the actual experience of those who have been successful in their choice of men. Let us take as one example, then, the experience of the Detroit Steel Products Company.

This company lays proper stress on the importance of using written specifications when hiring men.

The essential purpose, in making use of written specifications, is to define and describe man and job and their mutual relations, in order that there may be a working basis of common agreement and understanding among the directly interested personnel of the organization.

In purchasing, a certain quantity and quality is secured for a certain price, and the particular material is usually bought because it is best adapted for its intended use. Specifications are drawn up, giving exact kind, dimensions, and so on, according to the intended use and amount of money to be spent. Therefore, from the business man's point of view, there is, obviously a great advantage in having written specifications which outline what the job is and what it is not, and which describe what the individual must be, and what he need not be. If these specifications were drawn up scientifically and followed closely and intelligently when help is selected, the result would be that the right man would be fitted into the right job at the right price.

The use of such specifications, then, would seem to be a fundamental method whereby the labor turnover may be reduced and the employer may be assured that he is getting and paying for his labor on a basis of set service and performance. And if, as the result of such happy selection, each man should find more joy in his work and pride in its performance, an important step toward industrial betterment would have been taken.

It is desirable that the specifications be written by only one person, who should have good power of synthesis and analysis, a judicial mind, and of course the literary ability to give in comparatively few words an accurate, reliable, and adequate description and definition.

If the plant or organization to be dealt with in this way should not already have an organization chart or tree, one should first be drawn up. This should show the structure of the business by divisions, sections, and departments, and should list the special classes and kinds of work within each, in order that a title may be given each operation, or "job," for which somebody is usually hired—as for instance, "power press hands" or, if it is thought advisable to attempt a finer and more elaborate division, power press A, power press B, and so on.

Following is a representative list of such titles, used to designate all jobs in one of the press departments of a large metal-ware business:

- 1 Foreman
- 1 Solderer
- 1 Die-setter
- 2 Power press A
- 3 Power press B
- 1 Power press C
- 2 Bench hands
- 3 Foot-press hands

Analysis of One Department.—First, then, select some particular department, and, after ascertaining from competent authority its general kind of work and its relation to the other departments, spend some

time watching the employees at work, observing their motions, efforts, habits, and system. What they do and how they do it? Talk with several employees and get their idea and their description of their respective jobs, as well as of the department as a whole. It is also a good plan to get the opinions and ideas of persons who are not directly engaged in any work in that department, but who, in the course of business, come more or less in contact with some phases of its activities.

Next, analyze the various steps from the point of view of what the workers do and how they do it. Then having satisfied yourself of what is necessary and essential, you may draw up a rough definition. This should cover, in general, a description of the particular job and of what particular kind of person would seem to be required to do it—the physical, intellectual and character essentials of the prospective employee. When completed, this definition should be submitted to the criticism of those engaged, directly or indirectly, in the work. More often than not, changes will be found necessary, for the men in the shop, while they are probably incapable of expressing themselves fully and adequately, can often perceive misstatements when they read over a description of this kind.

Some Specimen Specifications.—It is a chief consideration to be borne well in mind that each specification, before being adopted, should have the full and sincere understanding and approval of those who are to have authority over the person described. Moreover, this approval should be shown by the em-

bodiment, so far as possible, of their various ideas and opinions in one definition. Such a plan allows of all the advantages that accrue from a spirit of common council and makes for the successful use of the specifications.

It is also a good plan to make express statement of what the employee need not be, so as to check, if possible, any petty notions and prejudices on the part of any of the management, and make clear the intentions of the majority. This would cover politics, religion, race, nationality, etc.

Following are a few specimen specifications—of a foreman, a storekeeper, and a factory planner, respectively:

Foremen: Dependable, willing, competent man who can strike best practical adjustment between the factors of maximum production, minimum time, most efficient motion, least effort, best quality, and promote "Spirit of the Hive" through reciprocity, co-operation, and mutuality.

Storekeeper: Has charge and immediate supervision of all raw stock used in works. He receives it from cars, and disposes of it as requisitioned. A practical familiarity with tin plate, sheet and band iron, wire, rivets, etc., is therefore essential, that he may be able to measure, gauge, and identify their general quality and grade. He must be intelligent enough to read and write, understand and appreciate the purpose and function of such clerical forms as requisitions, manifests, etc, used in shipment of ware from plate mill to machine he delivers it to, and have a good command of the ordinary arithmetic operations. He should have a good visual memory, a regard for the systematic arrangement and efficient location of his material, and a close knowledge of it.

Factory Planner: Might be defined as factory clerk, ex-

perienced, and familiar with the general ware, its special kinds, sizes, and classification by item, and having an appreciation of the general process and sequence of manufacture, seasonal variations, and shop practicalities, sufficient to program a miscellaneous volume of work with most efficient result. He must be able tactfully to obtain, organize, and put into effective motion the active co-operation of each foreman, and therefore must have adequate, reliable, and immediate knowledge, records, and aides (as an order and progress clerk), so that he can further and, possibly, check the quality and extent of the foreman's co-operation. The progress file and schedule-of-work run by the planner on orders pending, in process, and available, is in a large measure built and arranged on the accepted promises of the foremen in consultation with the planner, and is adapted, as closely as circumstances permit, to the demands of the general storekeeper. Hence, good power of analysis and synthesis, ability to form a safe average judgment, tactful persistence, and a retentive memory are essential qualifications of the planner.

The ideal planner would have a thorough appreciation of the full possibilities of men (i.e. labor), equipment (machines), and supervisory forces, and the responsibility and ability to strike the best practical adjustment between the desired volume of production, various elements of time, promises given and accepted, and departmental and factory co-ordination, and to obtain maximum production and quality in minimum time and with minimum cost, as well as with least effort and waste on the part of the various factors of production.

The Application Blank.—Selection based on detailed specifications is the beginning of what might be called scientific employment. A part of this method is, of course, the right use of application blanks. Too little thought has been given to the

value of a good application blank. Executives have overlooked the testing value that a carefully planned blank possesses. In connection with the subject of this chapter I examined more than fifty different application blanks, of leading corporations, and but three or four of them might be said to indicate that serious attention had been given to this matter.

The fact is, the blank serves a purpose both for the applicant and for the employer. Now, every one knows that in practical experience the process of selection should be made as simple as possible. An applicant for employment would be "scared away for good" if he were put through a personal inquisition; no American workmen would tolerate any prying into his personal affairs. The application blank must not be inquisitorial. There is a difference in the case of bonding companies, or other concerns that have to go surety for a man who is to handle funds.

An application blank must be specially worked out for each plant, and for each department of the plant, in order that the applicant may be given an opportunity to become acquainted with the exact nature of the work he is applying for. The questions concerning his experience and his fitness for the work he thinks he can do, should be most detailed. All the questions should encourage frankness, and when a man has been accepted, the blank he filled out should constitute one of the permanent records concerning that employee. But, it may be remarked, a man who applies for a simple job, such as packing, cannot be expected to have autobiographical skill. The point is that filling out a blank is not a literary

exercise, but a means of aiding in the proper selection of men. The best of them may be poor hands at using a pen; a sensible employment manager would take this into account and give time to helping any applicant who needs assistance. Indeed, wherever possible, blanks should be filled out under the supervision of some one in the employment office, who should sympathetically explain the value, both to the man and to the firm, of complete information.

A great drawback to good organization is the meagreness of information about the workers, and the consequent liability to misjudge them. To work well with men, one must understand them. If they are merely numbers or letters, no vital relationship between employees and employer is possible.

I therefore have laid stress on the importance of using proper application blanks and of giving personal help to those who fill them out, merely to emphasize the necessity of helping to bring about a spirit of personal and helpful contact at the very outset. In every blank, as a rule, questions are asked as to the applicant's reasons for leaving previous positions. A good deal of tact and insight are needed to get both a correct answer and an understanding of the circumstances that have attended the leaving or the discharge, as the case may be. Here the real intelligence of the employment executive is tested. When gross instances of previous dishonesty or other disqualifying misconduct are revealed, there is likely to be little doubt as to the course of action to be pursued, although even in these instances, an under-

standing employer may justly make many allowances, and still hire a first-rate man. The tendency to jump at conclusions is all too common. In the selection of men there is great need to use judgment and sympathy, in order to invite truthful answers and to be able to make wise use of the information obtained.

Reasons for Leaving or Discharge.—Here is a summary gathered after a long and thorough examination of many reasons for leaving or discharge:

VOLUNTARY :

1. To secure better wages
2. To go into business
3. To go into different line of work
4. (a) Monotony
(b) No prospects for future
(c) Effect on health
(d) Wages better
5. Marriage
6. Labor dispute
7. To go to school
8. Dissatisfaction with work.
9. Dissatisfaction with working conditions (including sanitary conditions)
10. Distance from work too great
11. Personal difference with superior
12. Bad treatment by superior
13. Differences with fellow-workers
14. Domestic difficulties at home
15. To give up work
16. To leave the city
17. Increase in length of work day
18. Poor housing conditions.

INVOLUNTARY :

1. Work below standard
 - (a) Too much spoiled work
 - (b) Poor quality of work
 - (c) Lack of neatness
2. Progress not rapid enough
3. Lay-off
4. Reduction of working force
5. Trouble
6. Intemperance
7. Personal differences with foreman or other superior
8. Racial difficulties in the shop or plant
9. Violation of firm rules
10. Accident
11. Physical unfitness
12. Death
13. Dishonesty
14. Inability to work well with others
15. References unsatisfactory
16. Arrest on criminal charge
17. Lateness
18. Frequent absence from work
19. Slow production
20. Wage dispute
21. Insubordination
22. Suspicious conduct
23. Carelessness
24. Disloyalty
25. Unreliability
26. Work temporary

The causes assigned were not necessarily evidence of the real facts—some of them were probably only clumsy approximations of the truth. I have given

them only because the records listed them. Those who judge men only by what they have written are undertaking a serious responsibility indeed.

The best employment managers who have before them a list such as is here given, know that each cause of a serious nature will bear a very sympathetic investigation. Experience has told them that in selecting men, they must do so with a fresh outlook, unprejudiced by what has gone before.

To use the application blank, then, is one way of getting a fresh start, and the record which it will contain is only for the purpose of getting together a means of undertaking new relationships.

Medical and Physical Examination.—One of the most fundamental practices in the selection of employees is that of giving the medical and physical examination. It is a growing practice of great benefit to all concerned, but one as yet viewed with suspicion, if not indignation, by a large number of workmen. Now, the reason for the suspicion and indignation is not far to seek. One may well sympathize with it, for it reflects a wholly commendable attitude, even though those who assume it are misinformed. Employees resent any invasion of their right to privacy, just as all other self-respecting men do. Furthermore, they believe that if they seem reasonably qualified for the work they apply for, and pass ordinary muster, there is no excuse for the employer's going further in order to discover prejudicial facts against them. This attitude is the result of the aloofness between management and men, the lack of team work and mutual confidence.

Any right-minded workman will consider it only right that he and his fellows should undergo physical examination, in order that sickness and contagion may be intelligently guarded against, but if a physician is to examine him, he prefers to have one of his own choosing, who will be professionally bound to treat as confidential whatever an examination may disclose. One cannot find fault with this thoroughly normal attitude. From every viewpoint, of health, safety, right adjustment to work, group insurance activity, and workmen's compensation laws, some form of medical certification for a job is quite necessary.

The opposition, it is clear, is not to medical or physical examination in itself. Here, then, is an opportunity for tactful explanation and negotiation. Whenever men have understood the true object and the real benefits of the procedure in question, they have responded finely. As a matter of fact, an examination is never intended, and never should be intended, to keep men out of employment, but to render it possible to make the most beneficial use of their strength and capacity.

A Typical Experience.—As typical of the experience of every factory manager in this connection, I will give the experience of a certain large department store in the Middle West:

Their experience showed them that had they possessed accurate information as to the true physical condition of the employees, in a number of instances they would have been instrumental in suggesting changes in location and in mode of living that might

have saved years of life for work and earning capacity. This responsibility was felt so keenly that in no small way it fixed their determination to undertake the work.

Another consideration leading to the decision was a belief in this work as a means of developing individual and collective efficiency in the whole organization. They had been doing educational work among their people for a number of years, and the value of mental equipment was always recognized, and definite means were taken to supply it. In the same way, good health was recognized as a very important factor in the success of the business, and yet nothing was done to emphasize its importance. The store superintendent charged with the duties of employment, without a physical examination relied, perforce, on his superficial observation and the integrity of the applicant's statements relative to health. Supported, however, by a physical examination, his investigation may be confined to the applicant's other qualifications for the position he or she desires to occupy.

The value of physical examination of employees has been proven by their actual experience. Here is the testimony of the present store superintendent on this point:

Our house physician, nurse, and hospital perform such valuable service to our business in the way of keeping our people on the firing line, in the way of economy to our employees and ourselves, that to dispense with them would be an unwise move. Stores not having such facilities do not realize that the investment would pay large annual health dividends.

A small but well-equipped hospital has been furnished, which is and are prepared to take care of first-aid treatment in case of accident, and there are beds for temporary rest in acute cases. The work is done by a house physician, who devotes a definite part of each day to the task. A nurse is employed, who devotes her full time, and who is in charge of the hospital and the demands upon it in the doctor's absence. The service rendered is free of any expense to the employees, and is compulsory only to the extent of the initial, or entrance, examination.

Every employee is free to call on the doctor, or may be sent by the department head to him during his hours. In order to give some idea of the use that is made of this service by the employees on their own account, I would say that the records show that on an average more than 350 treatments are given to the employees monthly, and that customers are taken care of to the average of about 15 a month.

The house physician has charge of all matters relating to store sanitation, and is ready at all times to give, and does give, to employees advice on any topic relating to diet, hygiene, or general health.

It has developed in the work that about 5 per cent of all applicants for positions, who would, without a physical examination, be employed, by such an examination are shown to be unfit for service. The reasons for their rejection classify themselves in the order of their importance, as follows:

1. Venereal diseases.
2. Tubercular troubles.
3. Skin troubles of a contagious nature.

4. Eye diseases of a contagious nature.
5. Physical unfitness not of a contagious nature.

In addition, there are about 5 per cent who are put in a doubtful class, but who are employed. Those employed, however, under these conditions, are examined weekly, and this examination is compulsory until it is certain that they are able to do their work safely and improve in their physical condition while doing it. Those coming in this class are frequently under weight, or are in poor physical condition, owing to their having done work for which they are unfitted.

These examinations also give the house physician and the employment officer the ability to work together and to shift a person from one position to another for which that person is better fitted physically.

Fully 25 per cent of the applicants have minor defects, which are corrected when their attention is called to them, but which would be neglected if they were not examined. Oftentimes these defects are unknown, and a distinct gain has been made—after the examination—by the person examined, and also by the company for which he or she must work. These minor physical ailments classify themselves as follows:

1. Defective teeth.
2. Nose and throat troubles.
3. Defective vision.
4. Flat feet.
5. Varicose veins of different types.
6. Slight hernia.

All of these defects are usually corrected promptly, and observation shows that attention to these minor details results very soon in an increase in general health and a greater capacity for work.

The remaining percentage is found to be in good condition when first examined. Inasmuch as this is the only mercantile firm in the city to exact physical examination as a qualification for employment, a number, knowing themselves unfit, will not submit to an examination, and leave rather than submit to it.

In four years, by the precautions that have been taken and the physical examination insisted upon, the employees have been so protected that not one acute eruptive contagious disease has developed during their service. Some of these diseases have developed outside of the store, but the patients have been taken away from their employment and placed under the care of their physician forty-eight hours before the contagious condition appeared.


The Psychological Test.—Of late years there has been a sensational growth of interest in psychological tests as a basis of the selection of employees. This interest has been partially fomented by rather sensational claims on the part of some psychologists themselves.

If it were possible by a group of tests, by the use of apparatus, or by personal interviews to settle questions of fitness and unfitness, the work of the employer in building up a working force would be simple indeed. I know of nothing yet in the laboratory of psychologists to warrant the hope of relying

on other means than those indicated in this chapter together with strong common sense.

To be sure, there are various kinds of thoroughly established tests of mental ability. To a large degree they have an abstract scientific interest, but they cannot be widely used in industrial practice, and can rarely be used intelligently at all except by a trained psychologist. A medical and mental examination by a good physician, should in most cases readily indicate whether or not the applicant has normal mentality, although some of the most dangerous defectives seem to have sound constitutions and agreeable personalities. While industrial psychological tests have not yet been developed to an extent that would seem to indicate wide use of them in the near future, in connection with certain lines of work effective tests have been evolved. Professor E. L. Thorndike of Columbia University has worked out a very successful method of measuring clerical ability, and Professor Walter Dill Scott and his able associates, at Carnegie Institute of Technology, are developing tests of selling ability. But since the attitude of such men is always conservative and modest, it is a little hard to judge, as yet, exactly what may be expected in practice of the methods that they have discovered.

The actual job itself, under characteristic conditions, offers the best test of all. Selection based on a good interview, adequate application-blank information, a "tryout," or probationary, period, a medical and physical examination, and sane judgment on the part of the employment manager, will in the



majority of cases constitute a better method of selection than any other yet proposed.

Sane judgment, however, seems to be a stumbling block in the large majority of cases. Too often we see the employing left to men who are notoriously weak in this quality. In this and previous chapters I think enough has been said to indicate conclusively that the man in charge of employment should be carefully selected and trained chiefly in the development of this faculty.

CHAPTER VIII

MAINTAINING THE WORKING FORCE—

REWARDS, COMPENSATION AND INDUSTRIAL INCENTIVES

Some Vital Questions.—The difficulty of maintaining the working force has been, and still is, one of the most perplexing problems with which industry has to deal, and yet not until recently has it been treated with anything approaching a scientific spirit. Various plans were adopted, but they were soon abandoned because they proved ineffective. All sorts of premiums, prizes, and other forms of incentive were introduced with the hope of inspiring some successful plan, all to no avail. The chaotic conditions in industry invariably revealed the weakness of the employer.

It was not until employers took a personal interest in the worker and in his social and economic problems that any progress was made. Thoughtful study of why workers leave, reveals the fact that in the final analysis the most important factor in the maintenance of the working force, is the provision of an adequate wage.

The problem has been solved in some notable cases, but it still presents embarrassments that are by no means small or easily adjusted. What is an adequate wage? What is the basis of determining such a wage? Upon what conditions, social and economic,

does the size of the wage depend? Who shall determine what is an adequate wage? How much do experience, environment, education, sex, age, special training, home conditions, market conditions, labor conditions, public opinion, and many other elements, count in the solution of the problem? What value shall be placed upon each of these elements? Who is to settle such values and say that they are right? These questions indicate how serious that problem is—and it is growing more serious. At any rate, it is clear that the wage question is at the bottom of industrial dispute and disturbance.

Wages and Strikes.—In the United States, in the period from 1881 to 1905, the question of wages was involved in 16,918 strikes, or in 43 per cent of all the strikes that occurred during that time. Out of 96 strikes throughout the United States in June, 1917, 80—or 83 $\frac{1}{3}$ per cent—resulted from wage disputes. Government investigation of union wage scales and the retail prices of food, reveal the fact that during the period from 1907 to 1916, while wages were increased materially, such increases did not keep pace with the advance in the cost of living. In the year from February, 1916, to February, 1917, there was an increase of 177 per cent in the price of onions, 107 per cent in the price of potatoes, and 61 per cent in the price of beans. During the period of February, 1913, to February, 1917, potatoes rose 224 per cent in price. These facts show that with the purchasing power of labor as low as it was, the worker had of necessity to fight frequently for higher wages.

Income and Service.—Critics of our present system of the distribution of wealth, claim that income should be based upon service, and that this principle is entirely lost sight of under our present regime. The “wealthy class,” 2 per cent of our people, own 60 per cent of the wealth of the country; the “middle class,” 33 per cent of the people, own 35 per cent of the wealth; the “poor,” 65 per cent, own 5 per cent of the wealth.*

The report of the Commission on Industrial Relations† states that the incomes of workers in the highest paid industries—such as railroad engineers and conductors, glassblowers, some workers in steel mills and some in a few of the building trades—range from \$1,500 to \$2,000.

Such an income means, under present conditions, a fair living for a family of moderate size, education of the children through high school, a small insurance policy, a bit put by for a rainy day—and nothing more. With unusual responsibilities or misfortunes, it is too little, and the pinch of necessity is keenly felt. To attain such wages, moreover, means that the worker must be far above the average, either in skill, physical strength, or reliability. He must also have served an apprenticeship equal in length to a professional course. Finally, and most important, he, or his predecessors in the trade, must have waged a long, aggressive fight for better wages, for there are other occupations whose demand for skill, strength, and reliability are almost as great as those mentioned, where the wages are very much less.

These occupations, however, include but a handful com-

* W. I. King. “Wealth and Income of the People of the United States.”

† Vol. 1, pp. 30-31.

pared to the mass of the workers. What do the millions get for their toil, for their skill, for the risk of life and limb? That is the question to be faced in an industrial nation, for these millions are the backbone and sinew of the State, in peace or in war.

First, with regard to the adult workmen, the fathers and potential fathers, from whose earnings, according to the "American standard," the support of the family is supposed to be derived.

Between one-fourth and one-third of the male workers 18 years of age and over, in factories and mines, earn less than \$10 per week; from two-thirds to three-fourths earn less than \$15, and only about one-tenth earn more than \$20 per week. This does not take into consideration lost working time for any cause.

Next are the women, the most portentously growing factor in the labor force, whose wages are important, not only for their own support or as the supplement of the meager earnings of their fathers and husbands, but because, through the force of competition in a rapidly extending field, they threaten the whole basis of the wage scale. From two-thirds to three-fourths of the women workers in factories, stores, and laundries, and in industrial occupations generally, work at wages of less than \$8 per week. Approximately one-fifth earn less than \$4, and nearly one half earn less than \$6 per week.

What is an Adequate Wage?—Let us refer to our original question, "What is an adequate wage?" Several attempts have been made to supply an answer, none of them very satisfactory, but the best definition yet offered comes from John A. Ryan,*

* "Distributive Justice," Macmillan Co., p. 361. See also "A Living Wage," by the same author.

who says that the worker has a right to expect a decent livelihood, which he describes as follows:

He has a right to so much of the requisites of sustenance as will enable him to live in a manner worthy of a human being. The elements of a decent livelihood may be summarily described as food, clothing, and housing sufficient in quantity and quality to maintain the worker in normal health, in elementary comfort, and in an environment suitable to the protection of morality and religion; sufficient provision for the future to bring elementary contentment, and security against sickness, accident and invalidity; and sufficient opportunities of recreation, social intercourse, education and church membership to conserve health and strength, and to render possible in some degree the exercise of the higher faculties.

Employers would do well to read and analyze this definition carefully. It expresses the thoughts, desires, and objects that wage-earners seek to attain—and they are gradually attaining them through their trade-unions, and through legislation. Recognition of these needs and of the indifference of industry to these needs has caused the minimum-wage question to be agitated, and the minimum-wage to be adopted. To put it more concretely, low wages are responsible for minimum wage legislation.

The Commission on Industrial Relations makes the following observation:

The welfare of the State demands that the useful labor of every able-bodied workman should, as a minimum, be compensated by sufficient income to support in comfort himself, a wife, and at least three minor children, and, in addition, to provide for sickness, old age, and disability. Under no other

conditions can a strong, contented, and efficient citizenship be developed.

Under existing conditions such an income is not received by fully one-half of the wage-earners employed in industry.

Factors Determining Size of Wages.—Several factors determine the size of wages, in spite of the fact that the present wage system is more or less haphazard, unscientific, and unstandardized.

1.—Wages must be comparatively higher in seasonal occupations and where employment is irregular than in occupations in which employment is continuous throughout the year. The worker must be able to subsist during the slack period, and so he asks a wage that will help him get along when there is no work. In many seasonal industries the wage is utterly inadequate, and in such we therefore find eternal strife between worker and employer.

2.—The nature of the work is another consideration in the setting of wages. Disagreeable work must be accompanied by attractive wages. Work that involves risk of life and limb must pay well. The diver must get a much higher wage than the seaman. And so it is with work requiring a high degree of skill.

3.—The character and extent of training required of workers is an important item. Technical-school graduates and professional workers consider the time and money put into study as an investment that must bring commensurate returns, and so their wage standard is high.

4.—Another factor is the character of help employed and their standard of living. Coolie labor means low wages. American labor means wages that bear some relation to American standards of living. And so, also, in the case of immigrant labor, female labor, and juvenile help, the wages are determined largely according to the class of workers.

5.—A vital factor is the labor supply and demand. When labor is scarce—as it is today—and competition for such labor is keen, the worker can exact a higher price for his labor than the employer would be willing to pay under ordinary circumstances.

6.—The extent of unionization in the trade or occupation is another prominent factor. The bargaining position of the worker is more secure and more influential if he is a member of an organized group. As an individual, he possesses little bargaining power; he must accept what is offered him, or look for a more generous employer. But with the force of organized effort behind him, the wage-earner has the advantage of collective strength, and he finds that his demands are more readily granted.

George L. Bolen, in his "Getting a Living," comments upon unionism as follows:

Unionism has taught the workers how to bargain to get for their labor the greatest amount it will bring. . . . Before the time of unionism, they generally had to accept what was allowed by custom, in which there tended to prevail the idea that they were created to be poor, and were entitled to only what was necessary to keep them in condition to work. The same idea lingers yet in some quarters, and would doubtless

spread in the wealth and luxury of today if there were no wall of unionism against it. Human nature remains the same as it was.

The wages in non-unionized trades are much lower than in those in which unions exist, but the tremendous growth of industry in the last twenty-five years, and the diminution of the supply of labor, have helped considerably in effecting increased remuneration even among these trades.

7.—Competition among employers in disposing of their wares and in securing the help they need, has had a direct influence in causing an upward trend in wages.

8.—Where wages have not been brought up to the level necessary to maintain the member of the community estate, legislation has resulted which has compelled the employer to pay a better wage. Thus we have an increasing number of minimum-wage laws. These laws apply particularly to women, who are difficult to organize, whose trade organization is weak, and whose bargaining power lacks strength.

9.—Not the least important factor to be considered in arriving at a wage standard, is the efficiency of the management in enlarging production, reducing its cost, and disposing of the product without waste. Where scientific methods of production, distribution, and cost accounting are adopted, closer attention is given to the amount of wages. An attempt is made to standardize production, and so to adjust the wage rate that the worker will enjoy some of the gains which increased efficiency brings to the employer.

So we find various schemes of wage payment advocated, tried, and developed. But the employer wants maximum production at minimum labor cost, and here lie the sources of friction between employer and employee.

Time-Rate System.—Two systems are generally used, viz., the time-rate system and the piece-rate system. First we must consider the system whereby the worker receives a stipulated sum for a stipulated period of time—a day, a week, or a month. The standard time is set for the work to be completed. Production will vary with the nature of the work, and, so far as the wage is concerned, it represents a mere guess. Speed of production depends largely on the foreman and his methods of driving the men. While, under the system of time rates, the worker has little incentive for increasing production, nevertheless it is most often a case of whether or not the management knows how to deal with its working force so that they will give their best. Certain lines of work naturally require the time system. In this class is the work done by mercantile establishments and others which do not lend themselves to the operation of the piece-work system.

Piece-Rate System.—Large-scale production, with its necessary subdivision of labor, is responsible for the piece-rate system. This system is possible only when the “piece” has some sort of uniformity. Where conditions are such that the work cannot be measured easily, and is of a varied nature—as in the sorting of products of different sizes, shapes and weight, and in the loading of miscellaneous quantities—and when

it is necessary to travel from one place to another, and so on, time work only is possible. But where the worker is engaged in a specific operation, as in the shoe industry, and the metal trades, piece-rates constitute the most satisfactory method of payment.

The distinction between the two systems is most clearly stated by Schloss:*

The employee engaged on time-wage sells to his employer the labour which he shall perform within a given period, irrespective of the amount of labour performed within that period.

The employee engaged on piece-wage sells to his employer a specified amount of labour, irrespective of the time occupied by the performance of that labour.

Schloss points out that under the time-wage system the performance of neither more nor less than a given amount of work within a given period of time, in many cases virtually forms a point of the contract between the employee who is working on time-wages, and his employer. This condition is found in the tailoring trades.

Employers, on the one hand, usually require a minimum rate of speed, but workers, on the other hand, set themselves a maximum speed, which they refuse to exceed.

While, under the piece-rate system, the worker's compensation is in exact proportion to his share in the output, irrespective of the period of time in which the product is completed, yet time is an ever-present factor. In fact, the piece-rate is based upon the sup-

* David F. Schloss—"Methods of Industrial Remuneration," p. 10

position that the worker is able to earn so much a day. Thus, it often happens that when the worker, by dint of special application and dexterity, turns out an amount of product that enables him to earn a wage larger than he would have earned under the time-rate system, the unscrupulous employer reduces the rate per piece. Here we have the cause of many an industrial dispute. Such a practice needs no comment. Strikes among the labor force of such an employer are frequent. This injustice is what causes organized labor to fight against the piece-rate system in the hope of destroying it. Employers who engage in methods of this kind think they are fooling the worker, but they fool only themselves, and are entitled to none of our sympathy.

Differential Piece-Rate System.—The differential piece-rate system provides for a certain standard of performance accompanied by a certain rate per piece. This rate is paid only when the worker fulfills the required standard. Another smaller rate is given for production below this standard. For example, a rate of 12 cents per piece is paid if the worker makes 30 pieces per day. If he makes less than 30, he is paid at the rate of 10 cents per piece. The difficulty with this, as with other piece-rate systems, is that it arouses the opposition of organized labor, which claims that the system tends to cause over-speeding and exhaustion. If there is a breakdown in machinery, or other conditions arise for which the worker is not responsible, he loses part of all his day's income. Often a minimum rate of speed is set by the foreman directly, or by a "special boss" who is selected be-

cause he is the fastest performer, and the worker is forced to attain this rate or drop out. Or the piece-rate is based upon the income of the most rapid worker, instead of upon that of the average worker. This is one of the abuses that are responsible for much friction and discord.

Piece-rates should be established only upon thorough, scientific study of the process involved and of the average time it takes to perform it; and when once established, the rate should not be changed, unless it is raised. Experience has proved that it is generally "suicidal" for an employer to reduce rates.

There are, however, certain cases in which the rate may properly be reduced, as when some labor-saving device is adopted which enables the worker to produce more per day, and so to benefit by an increased total daily wage. But only a good management can lower the rate, even under such circumstances, without causing trouble.

Halsey Premium System.—One of the so-called "gain-sharing" plans devised to meet the defects in the systems of day-work and piece-work, is the Halsey Premium System. According to this method, a study is conducted to ascertain what the average time required for the completion of a certain piece of work, and then a standard time is set. If the worker completes his work in less than the standard time, he receives a premium for each hour saved.

The originator of the system cites a case to illustrate how it works.* The gist of it is this: A man

* F. H. Halsey, *Sibley Journal of Mechanical Engineering*, Vol. XVI.

receives, say, \$3.00 per day to produce a particular piece of a kind in ten hours. He is informed that he is to receive his regular \$3 a day, but that if he reduces the time on the piece he will be given a premium of 10 cents for each hour saved.

If he reduces the time by an hour, that hour represents in money value a gross saving of 30 cents. 10 cents of this amount is paid to him as a premium, leaving the remaining 20 cents in the employer's possession, this sum making itself manifest in the reduced cost of the work.

The result of this process is that wages go up and costs go down.

Halsey gives the following table, to make still clearer the operation of his plan. It will be noticed that when the worker has doubled his output, his wages go up from \$3 to \$4, while the wages cost of the work goes down from \$3 to \$2.

1	2	3	4	5
Time Consumed	Wages per Piece	Premium	Total Cost of Work = Column 2 + Column 3	Workman's Earnings per Hour = Column 4 ÷ Column 1
10 hours	\$3.00	\$0.00	\$3.00	\$0.30
9 "	2.70	0.10	2.80	0.311
8 "	2.40	0.20	2.60	0.325
7 "	2.10	0.30	2.40	0.343
6 "	1.80	0.40	2.20	0.366
5 "	1.50	0.50	2.00	0.40

HALSEY PREMIUM RATES

The question has been raised, to whether this system is fundamentally sound, for the worker is entitled to the full amount of his extra labor unless increased production on his part is due to improvements in machinery or equipment. Moreover, it is said that this plan increases "soldiering," an evil far greater than the benefits that it might bring.

Taylor System.—Frederick W. Taylor, "The father of scientific management," evolved a system which is based upon the "task" idea. The work of each employee is planned out by the management at least one day in advance; each man receives complete written instructions describing his task in detail, and noting the means to be used in accomplishing it. Each job has a standard time, which has been fixed after motion- and time-studies have been made by experts. This time is based upon the work possibilities of a first-rate man, who, after being instructed, is able to do the work regularly.

Under this system there are two piece rates, namely: (1) for workmen who cannot keep up their work—the rate given them is so low that they will be unable to earn a day's wages, and so will not want to remain; (2) for the good workmen a rate of pay from 30 to 100 per cent higher than the average of the trade. The worker gets the wages of the time he is able to save on his task.

A vital feature of the scheme is a properly organized planning department, which prepares the instruction cards and keeps records of time- and motion-study. Then there is the plan of "functionalized foremanship," which means that the work now gen-

erally done by the foreman is divided into several parts, or "functions," performed by various individuals, known as "functional foremen." There are instructors who teach the men how to perform their tasks. In his "Principles of Scientific Management," Mr. Taylor explains the system of instruction:

One of these teachers (called the inspector) sees to it that he [the worker] understands the drawings and instructions for doing the work. The second teacher (the gang boss) shows him how to set up the job in his machine, and teaches him to make all of his personal motions in the quickest and best way. The third (the speed boss) sees that the machine is run at the best speed, and that the proper tool is used in the particular way which will enable the machine to finish its product in the shortest possible time. In addition to the assistance given by these teachers, the workman receives orders and help from four other men: from the "repair boss," as to the adjustment, cleanliness, and general care of his machine, belting, and so on; from the "time clerk," as to everything relating to his pay and to proper written reports and returns; from the "route clerk," as to the order in which he does his work, and as to the movement of the work from one part of the shop to another; and, in case a workman gets into any trouble with any of his various bosses, the "disciplinarian" interviews him.

The elements of the mechanism of scientific management are given by Taylor as follows:

Time-study, with the implements and methods for properly making it.

Functional, or divided, foremanship, with its superiority to the old-fashioned single foreman.

The standardization of all tools and implements used in

the trades, and also of the acts or movements of workmen for each class of work.

The desirability of a planning room or department.

The "exception principle" in management.

The use of slide-rules and similar time-saving implements.

Instruction cards for the workman.

The task idea in management, accompanied by a large bonus for the successful performance of the task.

The "differential rate."

Mnemonic systems for classifying manufactured products as well as implements used in manufacturing.

A routing system.

Modern cost system, etc.

While Taylor's plan has certain obvious advantages—for example, it encourages high standards—there are some decided disadvantages. It is not applicable to all industrial processes. It generally operates in only part of a plant, while in other parts may be found the system of day-work, piece-work, task-work with a bonus, and differential piece-work. The workman must be sure of his day's pay or he will refuse to go on, disputes will arise, and perhaps serious labor trouble will result. In short, unless installed by proper experts and carried on with their assistance, the system is bound to fail.

Then there is the question of the worker's point of view. Organized labor is opposed to scientific management. Workers resent having the system thrust upon them, without their being offered an opportunity to express themselves on the matter. Successful government in industry is based as much upon the good-will of the workers as is government in any

democracy, and we must have industrial democracy if we are to have industrial peace.

Emerson System.—This system, which was introduced by Harrington Emerson, is based upon standardized shop conditions and tasks set by time-studies. Day-wages are guaranteed the worker, who starts with day-work and gradually takes up piece-work.

The standard task is given the worker, and if he accomplishes it he receives the rate for the time allowed and, in addition, 20 per cent of the time used. In this case the time allowed and that used are the same. Attainment of the standard time means 100 per cent efficiency. As soon as the worker reaches an efficiency of about $66\frac{2}{3}$ per cent, his opportunity for bonuses begins. If the worker uses less than the time allowed, his bonus amounts to 1 per cent for each per cent gain in efficiency, in addition to his 20 per cent for attaining 100 per cent efficiency.

So if a man is 125 per cent efficient, his premium will be 45 per cent. The efficiency of a worker is the ratio between the time set and the time taken to complete the task, or the difference between the standard time set and the actual time used.

Efficiency percentages are calculated for periods—from two weeks to a month—rather than for jobs.

The scale on the page opposite shows the plan.

Ficker Wage-Payment Method.—There is a newer method than the foregoing which differs from other methods of remuneration, in that it not only gives the workman a share in the direct labor expense saved through a reduction in the standard time al-

Per Cent Efficiency	Bonus
66.0	.0001
70.0	.0020
72.0	.0055
74.0	.0101
76.0	.0161
78.0	.0239
80.0	.0330
82.0	.0435
84.0	.0555
86.0	.0693
88.0	.0840
90.0	.1000

EMERSON BONUS RATES

lowed for completing a job, but also gives him an added bonus, consisting of part of the overhead expenses saved through such a reduction in time. The saving in the wages and the saving in overhead expense is divided equally between employer and employee, and is equally applicable to plants working on either day-work or piece-work, or on combinations of both.

This method of wage payment, devised by N. T. Ficker, provides for an equal distribution between employer and employee; of the savings in overhead expense as well as those due to direct labor saved by reduction of time in completing a task, on the basis, first, that the standard time allowed for completing any job has been satisfactory to the employer, or he would not have adopted it; and secondly, that the employee, because of his own extra endeavors, is

making a profit for his employer over and above that with which the employer would have been satisfied. In other words, it is a case of the employee presenting the employer with a certain sum and receiving one-half of it in return. The method is based entirely on the principle that the relation between the employer and the employee becomes that of a co-partnership after the required output is exceeded. It eliminates any contention on the part of labor-unions that the workman is not receiving an amount proportionate to his efforts.

The following are the formulas, for both day-work and piece-work labor, which are used in determining the wages earned by employees working under the Ficker wage-payment method:

Formula for Day-Work Labor

$$\begin{aligned} \text{Wages} &= R_e \times H_a + \frac{1}{2} [(R_m \times H_s) - (R_m \times H_a)] + \frac{1}{2} \\ &[(R_e \times H_s) - (R_e \times H_a)] = (\text{Saving in Overhead Expense}) + \\ &(\text{Saving in Direct Labor}). \end{aligned}$$

Formula for Piece-Work Labor

$$\text{Wages} = \text{Pcs.} \times R_e + \frac{1}{2} [(R_m \times H_s) - (R_m \times H_a)]$$

where

R_e = employee's rate per hour

R_m = machine rate per hour

H_a = actual hours

H_s = standard hours

In order to have a concrete illustration of how this method would be worked out in practice, let us assume that a job has been assigned to a workman getting 30 cents an hour, that the standard time

allowed for the completion of this job is five hours, and that the machine on which he is working has an expense rate of 20 cents an hour. Then, assuming that the workman has completed the job in four hours, or one hour less than the time allowed for its completion, his earnings would be computed as follows, according to the formula for day-work labor:

Employee's Rate per Hour (R_e).....	\$0.30	
Actual Hours Worked (H_a).....	4	
	<hr/>	
Regular Wages Earned.....		\$1.20
<i>Amount Saved on Overhead:</i>		
Machine Rate per Hour (R_m).....	\$0.20	
Standard Hours Allowed (H_s).....	5	
	<hr/>	
Total Overhead Allowed.....	\$1.00	
Actual Hours (4) \times Machine Rate (20 cents).....	.80	
	<hr/>	
Saving in Overhead.....		\$0.20
<i>Amount Saved on Labor Cost:</i>		
Employee's Rate per Hour (R_e).....	\$0.30	
Standard Hours Allowed (H_s).....	5	
	<hr/>	
Labor Cost Allowed.....	\$1.50	
Actual Hours (4) \times Employee's Rate (30 cents).....	1.20	
	<hr/>	
Saving in Labor Cost.....	.30	
	<hr/>	
Total Amount Saved by Employee...	\$0.50	
$\frac{1}{2}$ to Employee as Bonus.....		.25
	<hr/>	
Total Earnings of Employee.....		\$1.45

The foregoing example shows that the workman earned \$1.45 for four hours' work, instead of \$1.20

which he would have received on a straight rate of 30 cents an hour. If the workman repeated the same performance under the same conditions, for the rest of the day, which we shall assume to be eight hours, his earnings would be \$2.90, instead of the \$2.40 under the straight day-work method. On the other hand, if he were forced to remain idle for the rest of the day, and received simply his rate of 30 cents an hour for the remaining four hours of the day, then his earnings would be \$2.65 for the day, as compared to his regular wage rate of \$2.40.

In the case of piece-work, the workman shares in the saving in overhead that results from a job's being completed in less time than that allowed for its completion. A comparison between the Ficker and the Halsey method will show that while the Halsey plan simply gives the workman one-third of his direct saving in labor, the Ficker method increases this to one-half of the labor saved plus one-half of the overhead expense saved.

Task Work with a Bonus.—This plan was developed by H. L. Gantt.* An instruction card is provided each day, setting forth the "task" for that day. If the workman performs all of the task, he receives an extra sum, or a bonus. This bonus takes the form of an extra time-allowance, generally 25 to 50 per cent of the time stipulated for completing the task. The foreman also is given a bonus for each man under him who obtains a bonus, and an extra amount if all his men earn a bonus.

* H. L. Gantt, "Work, Wages, and Profit," The Engineering Magazine Co., New York.

Gantt gives the following illustration—an actual case—of the operation of the bonus system:

A foreman having ten men under him would get 10 cents each, or 90 cents total, if nine of his men made bonus; but 15 cents each, or \$1.50 total, if all ten made bonus. The additional 60 cents for bringing the inferior workmen up to the standard made him devote his energies to those men who most needed them.

The workman who fails to do the task within the time allotted merely receives his day's pay. The task, says Gantt, must be done according to a prescribed method, with definite appliances, and must be completed within a certain time before a bonus can be awarded.

The task is based on a detailed investigation, by a trained expert, of the best methods of doing the work, and the task setter, or his assistant, acts as an instructor to teach the workmen to do the work in the manner and time specified. Under this system, men who are skilled, and able to perform the task set, are selected.

They are then trained and then instruct the unskilled workmen.

Such a system as this can hardly be worked out by the employer without outside expert assistance; and unless such assistance can be obtained, it is wiser to let this plan alone.

As J. Russell Smith* points out, the system of task work presents three difficulties, viz.: (1) of actually attaining standard conditions, (2) of setting a task

* J. Russell Smith, "Elements of Industrial Management," J. B. Lippincott Co., Phila.

that is a fair one, (3) of the psychological resistance of the workman to change.

Summary of Wage Plans.—The table opposite summarizes the plans that I have discussed.

There are various other plans, such as that evolved by F. W. Taylor in his system of "Scientific Management," and by Harrington Emerson, in his "Efficiency,"* but we are not here concerned with scientific management and its problems. The object of this chapter is to sketch the more common methods of wage payment, and to describe some of the practical industrial incentives that firms have found successful as an aid in the maintenance of their working forces.

Bonus Plans.—Among the various bonus plans are some that are often confused with profit-sharing. Generally bonus plans do not (as in the case of profit-sharing) depend upon the net profits of the business. The bonus is in the nature of a gift from the employer to the employee, and the amount depends upon the employee's record of efficiency, the length of time he has served, or upon other conditions. The company determines what proportion of the actual profits for the year the bonus shall be. The rate may be changed from year to year, or a specified sum may be set aside from profits, to be distributed among employees graded in different classes, conditions for eligibility to which are specifically defined.

* Frederick W. Taylor—"Principles of Scientific Management" and "Shop Management," Harper & Bros., New York.

Harrington Emerson—"Efficiency" and "Twelve Principles of Efficiency," The Engineering Magazine Co., New York.

SYSTEMS OF WAGE PAYMENTS REDUCED TO A UNIFORM NORMAL PAY ON AN 8-HOUR JOB at 20c per piece, or 8 pieces per day at 20c per hour, 8-hour day									
Percent of Specified Time.....	25	50	75	100	125	150	200	Method Used in Calculation	
Actual Time in Hours.....	2	4	6	8	10	12	16		
Time-Rate.....	40	80	120	160	200	240	320	Straight 20c per hour.	
Piece-Rate.....	160	160	160	160	160	160	160	Straight 20c per piece.	
Halsey $\frac{1}{4}$ Bonus.....	70	100	130	160	200	240	320	$\frac{1}{4}$ of time saved.	
Halsey $\frac{1}{2}$ Bonus.....	80	107	133	160	200	240	320	$\frac{1}{2}$ of time saved.	
Halsey $\frac{1}{2}$ Bonus.....	100	120	140	160	200	240	320	$\frac{1}{2}$ of time saved.	
Taylor Differential.....	240	240	240	160	160	160	160	High, 30c piece; low, 20c piece.	
Ficker Bonus (Day-Work Basis).....	130	140	150	160	200	240	320	$\frac{1}{2}$ labor and expense saved.	
Ficker Bonus (Piece-Work Basis).....	190	180	170	160	160	160	160	$\frac{1}{2}$ Expense saved	
Gantt Bonus*.....	192	192	192	192	200	240	320	30% of time saved.	
Emerson Bonus*.....	168	176	184	192	210	240	320	Time saved plus 20% premium on time worked.	

*Basis of standard time for Gantt and Emerson Systems is higher than those of other methods here described, and is therefore not comparative.

The fund to be divided depends upon any of the factors stated below:

- (1) Price for which the commodity produced is sold—the “sliding-scale” wage.
- (2) Gross receipts or gross profits.
- (3) Estimated probable profits of the business.
- (4) Wages or salaries earned, and period of service.
- (5) Period of service, and thrift as evidenced by the participants’ ownership of some stock of the company, or maintenance of a savings account.
- (6) Savings of prospective participants, as shown by subscription to, or ownership of, a specified amount of stock in the employing concern, or by the maintenance of a savings account.
- (7) Amount of savings collectively effected in production or operation.

Examples of Bonus.—Recently the Filene Store of Boston adopted a bonus plan as an experiment. They define a bonus as “an extra reward for an extra effort which produces an extra result in profit.” Each additional dollar of profit, of course, enlarges the bonus fund. The plan benefits all employees who were on the payroll for nine consecutive months after the adoption of the plan.

Certain requirements concerning the sales and the merchandise profit are set for each selling department. If a department reaches these standards, it receives an amount equal to one-half the improvement over the merchandise profit for the previous year. In exceptional cases 75 per cent of the improvement is to be paid; and in certain other cases, in which no great exertion is needed to meet the

standards set, a sum a little less than 50 per cent is given.

When a department is able to produce profits above those of the regular requirements, it receives an additional bonus of half the extra profit. Thus—to take a hypothetical case—a department shows sales of \$100,000, and a merchandise profit of \$2000. The bonus requirement calls for \$120,000 in sales, and a profit of \$3000. The amount of increased profit is \$1000, so that the bonus is \$500. If, however, extra effort by the department should bring \$125,000 in sales, and a profit of \$4000, it would receive its bonus of \$500, and, in addition, \$500 for producing the extra \$1000 profit.

A committee of employees worked the plan out and helps administer it. According to this plan, each department bonus is divided into three parts, and these parts are distributed, respectively to the following groups of employees:

- (1) The buying staff
- (2) The selling organization
- (3) The general employees.

Another interesting bonus plan is that conducted by the Solvay Process Company, in addition to a profit-sharing scheme. The directors annually set aside a certain sum for distribution to all employees who are not entitled to benefit by the profit-sharing plan. These employees constitute what are known as the "participation classes." Length of service is the basis upon which the various sums indicated below are allotted.

For employees who have been in continuous service with the Company:

2 years.....	2	%	} of the salary earned during the preceding year.
3 "	2½	%	
4 "	3	%	
5 "	3½	%	
6 "	4	%	
7 "	4½	%	
8 "	5	%	
9 "	5½	%	
10 or more years.	6	%	

This plan has helped materially in reducing the labor turnover. The company statement on the subject is enlightening:

The men are benefited by it because, by receiving a lump sum once a year, they are more likely to have this money available to make payments on obligations, to buy real estate, or to make investments, than if it had been necessary for them to save an equal amount out of their weekly wages during the year.

The Crane Company, of Chicago, manufacturers of pipe fittings and brass goods, give each employee who does not share in the profits of the concern, a Christmas bonus consisting of 10 per cent of his annual earnings. Employees whose services are dispensed with through no fault of their own, receive their share up to the time of leaving. All rights to this bonus are forfeited if an employee is dismissed for cause, or if he leaves of his own accord.

The Jacob Dold Packing Company, of Buffalo, New York, distributes cash bonuses yearly to three classes of its employees: Class A—Foremen; Class B—Clerks and skilled workmen; Class C—Laborers.

All men in these classes must have been in the employ of the firm one year, their services must have been satisfactory, and they must be members of the Mutual Protective Association, to which they pay 50 cents a month toward a sick benefit fund entitling them to sick benefits of \$5 a week.

The bonuses are administered under the direction of an Executive Council of twelve—composed of managers and department heads—and a Junior Council of twenty, made up of the assistants in the various departments.

Class A employees are guaranteed an annual bonus of \$75; Class B, \$25; and Class C, \$12. These sums have no relation to the net profits of the concern. From 10 to 12½ per cent of the net profits in excess of \$100,000, are set aside for distribution among the Executive Council and the Junior Council. Each of the twenty members of the latter receives 1 per cent. The remaining 80 per cent is distributed among the members of the former, according to the position and responsibility they hold.

Traveling salesmen receive bonuses on the basis of the tonnage sold and the net profits accruing above the average of three previous years.*

Profit-Sharing.—This discussion of the foregoing bonus plan leads to a consideration of the subject of profit-sharing, which has been defined to be “an agreement freely entered into, by which the employees receive a share, fixed in advance, of the profits.” The essential features are:

* Report, Committee on Industrial Welfare, Cleveland Chamber of Commerce.

(1) The amount to be distributed is determined by net profits of the business, or by the amount of dividends to stockholders.

(2) The proportion of profits to be distributed is definitely agreed upon beforehand.

(3) The benefits of the plan extend to at least one-tenth of the total number employed, including employees in other than executive or clerical positions.

(4) Participating employees are acquainted with method of determining upon individual shares.*

There are only about sixty firms in this country today that are operating profit sharing plans. Many plans have been abandoned after short trial. The workman is apt to look upon these schemes as methods of keeping his wages down. If he has a share in the profits of his employer, he wants his share to be in the form of increased wages. The feeling is common today that labor is not receiving its full share. Mr. Gilman expresses himself as follows on this subject:

Profit-sharing is a modification of the wages system which removes the laborer from his present attitude of a simple earner of fixed wages, who has no further interest in the business beyond securing his regular pay, and makes of him a partner, to a specified extent, in the profits realized.

The history of profit-sharing began in 1842 when Mr. Leclaire, a house painter and decorator in Paris, allowed his workmen to have part in his profits. The plan of the Maison Leclaire will go down in history as one of the most successful methods of reconciling the interests of labor and capital. An example of successful profit-sharing in this country is the

* Bulletin 208 U. S. Bureau of Labor Statistics.

N. O. Nelson Manufacturing Company, of St. Louis, which divides net profits between the firm and the employees in the proportion that the invested capital bears to the wages paid. "The principle is, that the interest on capital, the wages, and the salaries for management, are expenses of operation, and that the profits should go in an equal percentage to the three factors: capital, skill; and labor."

If an employee leaves the firm within three years, the company reserves the option of transferring the credit balance into the profit fund for division in the usual way among the regular employees.*

The Ford Motor Company, of Detroit, go a little further than most, and, with respect to their profit-sharing plan, they demand of all participants, cleanliness, sobriety, industry, and thrift. Every new male employee is placed on probation for six months, after which period he is allowed to share in the profits of the concern up to the point at which his wages and his profits together will bring his earnings up to \$5 a day. Eligibility is confined to men over 22 years of age, married men living with their families, males under 22 who are the sole support of a widowed mother or next of kin, and those women who have some relatives solely dependent on them.

A corps of investigators is employed to explain the profit-sharing plan to employees, and to collect from each data concerning his eligibility. Each case goes to a committee of the sociological department, which passes final judgment on it.

Sears, Roebuck and Company, of Chicago, instituted a comprehensive plan on July 1, 1916. The

* N. P. Gilman, "Profit Sharing," Houghton, Mifflin Co., 1889.

purpose is set forth in the following announcement:

In order that employees may share in the profits of this business, and to encourage the habit of saving, the Company has decided to contribute annually a sum equal to 5 per cent of its net earnings (without deduction of dividends to stockholders), as shown by the annual audit of its books, to an Employees' Savings and Profit-Sharing Fund, as explained below, which will go into effect commencing July 1, 1916.

It is intended that this plan shall furnish to those who remain in the employ of the Company until they reach the age when they retire from active service, a sum sufficient to provide for them thereafter, and that even those who achieve a long service record, but who may not remain with the Company all of their business life, shall have accumulated a substantial sum. This Savings and Profit-Sharing Fund will enable an employee to secure an income for himself after the close of his active business career, or, in case of his death, for his family.

All employees, after three years' service, are eligible. They must deposit in the fund 5 per cent of their salary, to which sum is added the 5 per cent of the company. Employees are not allowed to deposit more than this 5 per cent, or, in any case, not more than \$150 a year. This condition is intended to prevent the larger salaried employees from too large a participation. Contributions by the company, made annually, are credited pro rata to participating employees in the proportion in which the amount deposited by each employee during the preceding year for which the company has contributed, stands to the total amount deposited by all employees that year.

A depositor who has been employed ten years is

allowed to withdraw all money credited to his account, including the contributions of the firm. Those employed less than ten years will be entitled to withdraw only the amount they deposited, plus interest at 5 per cent a year, compounded semi-annually, and no more. An exception is made in the case of women depositors, who, after five years' service, leave to be married. They receive their full share of the fund. The death of a depositor entitles his estate to the full share.

Loans are made to depositors when they present cases of actual need, if the trustees consider the circumstances to warrant such action.

The fund is administered by a board of five trustees, selected by the board of directors of the company; three of the trustees are chosen from among the officers or directors and two from among the employees. The plan is to try as far as practicable to invest the fund in shares of stock of the company.

The company may discontinue the fund at any time by announcement, which must be made, however, at least six months before the time of its final yearly contribution.

Independently of this plan, each employee receives every year an "anniversary check," which is given as a bonus.

Lever Brothers, Ltd., of Port Sunlight, England, have a plan which they call "prosperity-sharing," but which is really more than that. Besides being offered shares in the profits, certain employees are made co-partners and are given responsibilities in the control of the business. After an employee has

been in the firm more than two years, he may not be arbitrarily discharged. If he should be so dismissed, he may appeal to a committee, and, if necessary, from that committee to the head of the firm.

Lever's plan of co-partnership gives each section of the works representation through a committee of co-partner workmen and managers. Above this committee is a council, and above that the Board of Directors. The workers thus have control over many of the details of the industry.

Stock Ownership.—Many firms have realized the value of offering their employees stock as an incentive to continuous service. One of the most successful examples of this method is the case of the United States Steel Corporation. Employees of this concern may purchase stock and pay for it monthly out of their regular wages. The company, to remunerate itself, makes deductions from the employee's wages. Such deductions may not exceed 25 per cent of any one month's salary or wages, and stock must be paid for within three years. Interest at 5 per cent is charged on the balance due for stock.

The stock becomes the absolute property of the subscriber as soon as it is fully paid for, but if the employee retains it and remains employed, he receives an extra dividend of \$5 a share each five years.

Subscriptions are canceled when the employee leaves the service, or when payments due on the subscription remain unpaid three months without the consent of the corporation. The payments made on the stock, plus 5 per cent interest a year, are returned to the subscriber.

The United States Rubber Company has a somewhat similar plan. The company pays \$3 a share each year for five years if the subscriber retains his stock, remains employed, and gives satisfactory service to the firm.

The Proctor and Gamble Company plan of stock ownership is a very successful one. It includes all employees who are earning less than \$1500 a year, except salesmen and traveling representatives. Any employee who desires stock may make application to the treasurer to have him purchase for the employee common stock of a value equal to the latter's annual wages. The price paid is the market value of the stock at the time application is made. The stock thus purchased is held for the benefit of the employee by three trustees appointed from time to time by the board of directors. These trustees may be selected at the board's discretion from the company's officers, directors, or employees.

At least $2\frac{1}{2}$ per cent of the cost price of the stock must be paid at the time when the application is approved, and not less than 4 per cent of the total amount of the subscription must be paid each year. All cash dividends declared upon the stock purchased by employees, and other dividends due employees, are credited toward the balance that remains unpaid upon stock. Interest at 3 per cent a year is charged on the unpaid balance. Stock or dividends are not assignable.

A trust receipt is given to each employee who subscribes to stock, and that receipt entitles him to dividends from the stock at the rate of 20 per cent

a year upon the amount of wages that he actually earns during each year or part thereof, under certain conditions, including the following:

- (a) The employee shall be in the employ of the company continuously during the semi-annual period just preceding, or from the date of his Trust Receipt Pass Book (given upon first payment or account of stock purchased), if same was issued during the previous semi-annual period.
- (b) If the employee is discharged, or leaves the company, or makes application for withdrawal from this plan—during the semi-annual period, he is not to receive any Trust Receipt dividend.
- (c) When stock has been fully paid up, the Trust Receipt Pass Book is recalled and a Paid-Up Trust Receipt is issued. Dividends (except stock dividends) are then paid in cash.

After an employee has been a share-holder of common stock for five years, he may increase his holdings to 125 per cent of his annual wages at the time of application for the increase. He thereafter receives, as a dividend, 25 per cent a year upon his wages. After ten years' employment, holding may be increased to 150 per cent of the annual wages, and the trust-receipt dividend will be 30 per cent of the wages.

The company reserves the right to alter or amend this plan at any time, or to terminate it.

Group Insurance.—A recent development in the insurance field which has a direct bearing upon the question of maintaining the worker, is the system of group insurance. The plan aims to provide life

insurance for a group of employees, without requiring individual physical examination. Premiums, which vary in size with the nature of the industry, are paid monthly by the employer. The insurance is payable, upon the death of the employee, to the beneficiary whom he has named.

The general basis of insurance is one year's salary—with a maximum, for any individual, of \$3000. Some employers grade the amount of insurance according to length of service. Insurance benefits may be settled in twelve monthly payments. The beneficiary may benefit by the policy only if the employee dies while in the service of the company. New employees are required to pass a simple health test. Insurance ceases automatically when the employee leaves the employ of the company.

As I stated above, the premium varies with the industry. One company estimates the gross cost to the employer as about $1\frac{1}{4}$ to $1\frac{1}{2}$ per cent of the annual payroll. This may be reduced by premium refunds in the shape of annual dividends paid to the employer. At certain periods, adjustments are made between the employer and the insurance company to meet conditions that result from both the discharge or withdrawal of certain workers and the hiring of new ones.

Insurance companies, in making their investigation of the firm that wishes to take out group insurance, always ask certain questions. Here are some of them:

What portion of the employees have a yearly vacation with a continuance of salary during vacation?

How many common laborers, and what sort of work do the different ones do?

State the youngest age at which employees are engaged and the percentage of employees above fifty years of age?

Have there been any strikes during the last five years? If so, give cause.

State approximately the number of each nationality represented among the employees if more than 10 per cent of the whole number.

Describe the buildings, precautions against fire, condition of toilet and wash rooms; are they clean, well lighted, and sanitary?

Are the wash rooms well provided with soap and towels?

Give full information in regard to drinking water. Is it filtered? How often is it analyzed? Are the general provisions for employees' drinking water sanitary?

The advantage of this form of insurance is that it is conducive to continuous service on the part of the worker. In many cases, it gives benefits to workers who could not ordinarily pass the medical examinations required in the case of individual policies, and it gives workers who cannot afford regular policies an opportunity to provide for their families with respect to the future.

On the other hand, we must remember that nothing, however attractive, can successfully take the place of an adequate wage. If workers receive a fair wage, and, in addition, are given the benefits of group insurance, the resulting conditions will go far toward reducing the size of the labor turnover, toward effecting harmony among the workers and inspiring confidence in the management. The scheme of group insurance is yet too new for us to be able to deter-

mine its true effectiveness. The plan seems to be working well, however, in the Montgomery Ward Company, of Chicago, where 2500 employees come under its provisions. The Studebaker Corporation recently adopted the plan, with excellent results. The Union Pacific Railroad is also "trying it out" with success. And in February, 1917, the American Rolling Mill Company, Middletown, Ohio, adopted the scheme for its employees. In a later chapter, group insurance will be discussed in more detail.

Just Treatment the Secret of Success.—In connection with all plans in regard to profit-sharing and other welfare work for employees, it should be remembered that the spirit of the firm is the vital consideration. Many a firm has seen its well-organized plans wrecked on the rocks of hostility to organized labor. The employer who introduces a scheme of benefits for his employees because he wants them to become better friends of his, will find his efforts more than repaid. It does not take long for workers to discover motives. If the workers are contented, the result is increased efficiency in production, decreased labor turnover, and considerable savings in money. And above all, it should be borne in mind that just treatment of workers is the foundation stone of successful management.

CHAPTER IX

REDUCING LABOR TURNOVER

A Vital Problem Today.—It is highly significant that the term, “labor turnover,” now appears in the “Readers’ Guide to Periodical Literature.” It is equally significant that the material on this new subject is considerable, showing that progress has been made largely under the pressure of the necessity of dealing, in recent years, with this problem. Incidentally, labor turnover has been characterized as “one of the greatest problems in American industry at the present time.”

Two powerful causes have combined to bring this problem to the front: First, the world war, which practically cut off our immigration, and therefore our greatest source of an immediately available labor reserve at the “back door” of every factory. Second—and this cause is almost equally powerful—the enormous body of recent labor legislation, which again materially reduced the labor supply, as represented by our vast reserve of American boys and girls. These young people formerly were quite prematurely pressed into industry, but they are now afforded increasing opportunities for continuing schooling and vocational training. Moreover, thanks to a growing body of thoughtful citizens, employers, and

educators, labor turnover as a problem, which has always been with us in one form or another, for the first time received the attention it deserves. The industrial leaders identified with the organizations just mentioned thus anticipated, and in a measure forestalled, the consequences of the war, the decrease in immigration, and the shrinkage of our youthful labor supply.

What is Labor Turnover?—The Employment Managers' Association of Boston, the first to consider this problem both in open sessions and in round-table conferences, defined labor turnover as "the change in personnel brought about by hiring and the termination of employment." For example, if a firm that requires 500 persons to run its business during the course of the year, has passed through its doors 500 more without enlarging the force, that firm is said to have a labor turnover of 100 per cent.

Extent of Labor Turnover.—One of the most exhaustive studies of the extent and cost of labor turnover has been made by Magnus W. Alexander of the General Electric Company. In 1912, he made an industrial survey of a large group of factories. This survey dealt with the employment of male and female persons, and with a great variety of mechanical manufacture requiring labor ranging all the way from the highest skilled workmen to those entirely unskilled. In 1912, this group of factories gave employment to 38,668 workers at the beginning, and 46,796 at the end, of the year. In other words, the increase in the working force amounted to 8128 persons. During that year, 44,365 employees were en-

gaged—that is, 36,237 had dropped out. Evidently, then, about $5\frac{1}{2}$ times the required number of people had to be engaged during the year.

In 1913, Mr. Alexander made similar investigations in factories in Austria, Germany, France, and England, which convinced him that this problem of labor turnover is not only national but international. Indeed, he found the situation even worse in European industrial countries than in our own. For example, one factory hired 17,059 persons in 1913 in order to add to the force less than a thousand employees. Another factory hired 2148 persons during the year, and the total increase of its force was minus nine, so to speak. So much for the extent of turnover in this country and abroad.

Cost of Labor Turnover.—But the cost of labor turnover presents the greatest surprises. Mr. Alexander found industrial managers loath to express opinions on this matter, owing to the fact that they had never given it any serious thought. Their estimates range from \$30 to \$150 per employee. Some estimates were as high as \$200 per employee. Mr. Alexander, not being satisfied with these estimates, proceeded to probe deeper into the problem of cost. He found that the cost items of turnover to the employer are the following:

- a. Clerical work of hiring.
- b. Instruction of new employees.
- c. Increased wear and tear and damage of machinery and tools.
- d. Limited output.
- e. Spoiled work.

He then went on to find the cost of each of these items, and arrived at the astonishing conclusion that the apparently necessary engagement of 22,225 employees within one year, in the group of factories under investigation, involved an economic loss of \$774,139. This figure means that the cost of training a new employee, taking it all in all, amounted to \$34.85 or about \$35—a cost which not only comes within the range of the estimates heretofore mentioned, but which closely approaches the lower limit of the estimates.

Boyd Fisher, who made similar extensive investigations of cost, found that in the case of the Packard Motor Car Company, for example, “if the turnover of labor were reduced to zero, the entailed investment to turnover could be reduced by \$1,800,000. The interest, at 6 per cent, on this amount of money alone, amounts to \$108,000 per annum.” Moreover, on the assumption that the labor cost would also be reduced 25 per cent if there were no turnover, “anything from \$1,500,000 to \$2,000,000 in a year could be wiped out.”

Cost to Employee and Society.—The question of the cost to the employee and to society has so far received scant consideration. The employee who is turned down at the factory gate once in so often during the year, or turned out of the plant at the “say so” of any capricious foreman, is obliged to make the best of a very critical situation. Between the time he is “fired” and the time he is hired again, he has to live. This period of unemployment varies with industrial conditions. Unless the worker has a

reserve fund—and we all know that the vast majority of wage-earners have none—he is obliged to look after his family without any visible means of support. What that means to him and his family in terms of health, efficiency, habits of industry, and outlook upon life, is perhaps too obvious to be considered in detail. The man thus turned out of work, sometimes without cause or warning, clearly is not expected to become an enthusiastic rooter for the industry he is in, or for the industrial order of the day.

A superintendent said one day:

I could show you two hundred skilled workers, whom I've talked with—decent men, every one of them—who were thrown out from one plant last year without cause or warning. Today they are doing more to breed class bitterness, and to foment labor disaffection in this locality, than all the I. W. W.'s the police are ever likely to round up. You'll never again convince any one of these two hundred that there can be such thing as a square deal between capital and labor. And this instance isn't exceptional. It's like what's going on all over the country.

Causes of Labor Turnover.—Many conditions enter into these changes of personnel, some of which are beyond the employer's control or influence. Other conditions, however, are largely within the control of the employer, and, because of their obvious importance, they demand serious consideration. Problems relating to men are no less vital than problems relating to material, machinery, and markets; conditions affecting turnover lie at the heart of all personnel

problems. Intelligent consideration cannot be given these conditions unless there is a knowledge of the facts—and such knowledge depends upon accurate data.

It is impractical merely to group, or to express in total percentage, all the factors entering into turnover; these factors are irreconcilable. It is, to be sure, of value to know the percentage of exits from an industry, but it is of more value to know the causes of those exits. It is for this reason that a detailed analysis of reasons underlying termination of employment is invaluable.

We may say that an industry has a labor turnover of 100 per cent, or that the percentage of exits from the industry is 100, but the causes of those exits are far more important than this bare fact, since the amount of necessary hiring one year might be very high, owing to sickness, deaths, marriages, strikes, or some other cause over which the employer has little or no control—and the following year, owing to reduction of these causes the apparent turnover might be very low.

Therefore there are, in the main, two sets of causes of labor turnover; one set operating within the plant, and another set operating outside the plant. Among the causes mentioned above as operating outside the plant, may be mentioned the worker's changing his position to better his condition, his removal from the city, his being pensioned or becoming superannuated, and other withdrawals from the particular factor, or from industry itself, which the management cannot prevent. The causes operating within the

plant are in large part the result of poor management in the choosing, assigning, and handling of employees. It is this unnecessary hiring which indicates industrial turmoil.

In a sense, therefore, the causes of labor turnover operating within the plant are avoidable causes, but those operating outside the plant are unavoidable. So rapid, however, has been the progress made in dealing with the problem of turnover, that within a few years a growing group of enlightened firms have demonstrated that the so-called unavoidable causes are largely preventable, provided the employer cares to exert his influence outside the four walls of his establishment—to reaching the home and environment of his employees. For it is there that he will find far more powerful factors of industrial efficiency than any influence within the factory walls. Some of the firms that have been pioneers in this remarkable movement are William Filene's Sons, the Ford Motor Car Company, and the Santa Fe Railroad Company.

Boyd Fisher makes some comments upon the subject of employment that are well worth quoting:

The remarkable thing that is developing in employment work in Detroit, is the disposition to tackle the whole job of reformation. Employers are striving to reduce the 80 per cent item of cost of inefficient labor where the expense is incurred: that is, outside of their own plants. They recognize that turnover of labor is a special phase of the problem of inefficient labor, and that the reduction of turnover is only the first step in a process of education and of economic pressure to elevate the standards of workmen. They aim not only

to keep workmen, but to develop them. And they are prepared to go as far as the workmen's own home life, even, to solve their problem.

Much of the impetus to this thoroughgoing effort comes from Henry Ford. Employers sometimes feel that they have much to forgive in Henry Ford, but most of his fault lies in doing so many things first. One of these is the extension of factory influence into the whole life of the workmen. All Detroit plants are beginning to follow him in this, and I honestly believe that they are profiting by his experience, and are taking the best and leaving the worst of his plan. Denied the credit of initiating the plan, and free from the fear of precipitating any such startled inquiries as have beset Mr. Ford, they are able to proceed slowly, quietly, and cautiously. The results so far have been good.

Miss Ida M. Tarbell came to Detroit prepared to revolt at "un-American" interference with the private concerns of workers, as evidenced by the Ford Procedure, and went away convinced in its favor. She said of the Ford Scheme to the Executives' Club, "I don't care what you call it—philanthropy, paternalism, autocracy—the results which are being obtained are worth all you can set against them, and the errors in the plan will provoke their own remedies."

So you will find in my scheme of labor-turnover reduction a concrete statement—a bill of particulars, so to speak—of the philosophy of the more progressive Detroit employers. Turnover breeds inefficiency, inefficiency breeds turnover, and the only way to break the vicious circle is to attack them, both at one time, and, for the most part, outside of direct factory activities.

The employment department in this view becomes the vestibule not alone to the factory, but to a better life. The employment supervisor becomes a co-partner with the teacher, the minister, the social worker, in the business of reforming

men. It wasn't Billy Sunday, it was the employers of Michigan, that put the state in the prohibition column. They wanted to remove the saloon on the route between the home and the factory. For the sake of securing more efficient workmen, our employers—and their personal representatives, the employment managers—are fighting for the elimination of vice and gambling through Mr. James Couzens, formerly vice-president of the Ford Company, and now police commissioner. They are fighting for better schools through Mr. Mumford of the Edison, and now president of the school board, and for better city government, more adequate housing, and better street-car facilities, through the disinterested public services of many busy manufacturers.

Methods of Computing Turnover Cost.—Mr. Fisher warns us not to rely too much on his figures. "No one knows," he says, "how much it costs to break in new men. The most conservative estimate of any authority is \$40 per man; but this, after all, is only an estimate." Mr. Alexander's estimate is \$35 per man. Unfortunately, aside from the careful estimates made by Mr. Alexander and Mr. W. A. Greaves, we have only occasional flashes of evidences as to the great cost of turnover.

Mr. Alexander's method of computing the cost, as we have seen, was to divide it up into five distinct items. Here are his figures, which represent the cost per employee: The expense of the clerical labor of hiring will be 50 cents. The instruction expense, which will vary, of course, with the skill and experience of the new employee and with the nature of his work, will range from \$2 to \$20. The wear and tear will range from \$1 to \$10. The reduced produc-

tion will range from \$5 to \$20. And the expense of spoiled work will average \$15. By this method he arrives at the figure for the cost of training a new employe: namely, \$35.

Mr. Richard Feiss* suggests that the average standing payroll for any given period should be taken as the basis for computing turnover.

In case there is a general reduction in the number of positions during the period, the percentage of new employees to the average standing payroll should be taken.

In case there is an increase in the organization, the percentage of quitters to the average standing payroll should be taken. In the first case, the amount by which the number of quitters exceeds the number of new employees, accounts for the reduction. In the second case, the amount by which the number of new employees exceeds that of the quitters, accounts for the increase.

Finally, with these principles as a basis, and Mr. Alexander's five elements of cost—mentioned earlier in this chapter—as his main divisions, Mr. Fisher worked out, with his usual thoroughness, a complete chart of the factors that enter into the determination of cost of turnover.

Analysis of Turnover.—The Employment Managers' Association of Boston, recognizing the difficulty of dealing with estimates and opinions in this important field, prepared for the recording of turnover a form that should henceforth supply any firm with the adequate fact basis, or method, for computing the cost of labor turnover. Every important

* "Personal Relationship as a Basis of Scientific Management." R. A. Feiss. *The Annals*, May, 1916, p. 51.

item in turnover is charted. The chart, which is reproduced here, is available to any who apply to the Association.

PLANT SUMMARY		
ENTRANCES	NUMBER	PER CENT
1 Employed	_____	_____
2 Re-employed	_____	_____
3 Transferred	_____	_____
4 Total Entrances...	_____	_____
<hr/>		
EXITS	NUMBER	PER CENT
5 Left of Own Accord	_____	_____
6 Discharged	_____	_____
7 Laid Off	_____	_____
8 Transferred	_____	_____
9 Unavoidable	_____	_____
10 Total Exits	_____	_____
Deduct Transferred and Unavoidable (8 and 9)		_____
Balance = Plant Turnover		_____
<hr/>		
REMARKS:—		

PLANT SUMMARY FROM RECORD OF TURNOVER ON OPPOSITE
PAGE

Methods of Reducing Turnover.—The best accepted plan for reducing turnover is unquestionably that of Mr. Boyd Fisher. Because of its excellence I have reproduced it at the end of this chapter. (See Appendix to Chapter IX, page 243.) A study of the

REDUCING LABOR TURNOVER

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RECORD OF TURNOVER																			
MONTH: _____ YEAR: _____																			
DEPARTMENT: _____ FOREMAN: _____																			
CANNERY: _____																			
ENTRANCES										EXITS									
<div> <div>NEW</div> <div> <div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div> <div>8</div> <div>9</div> <div>10</div> <div>11</div> <div>12</div> </div> <div> <div>UNEMPLOYED</div> <div> <div>13</div> <div>14</div> <div>15</div> <div>16</div> <div>17</div> <div>18</div> <div>19</div> <div>20</div> <div>21</div> <div>22</div> <div>23</div> <div>24</div> </div> <div> <div>TRANSFERRED</div> <div> <div>25</div> <div>26</div> <div>27</div> <div>28</div> <div>29</div> <div>30</div> <div>31</div> <div>32</div> <div>33</div> <div>34</div> <div>35</div> <div>36</div> </div> </div> </div> </div>										<div> <div>LEFT OF OWN ACCORD</div> <div> <div>37</div> <div>38</div> <div>39</div> <div>40</div> <div>41</div> <div>42</div> <div>43</div> <div>44</div> <div>45</div> <div>46</div> <div>47</div> <div>48</div> </div> <div> <div>DISCHARGED</div> <div> <div>49</div> <div>50</div> <div>51</div> <div>52</div> <div>53</div> <div>54</div> <div>55</div> <div>56</div> <div>57</div> <div>58</div> <div>59</div> <div>60</div> </div> <div> <div>LAO OFF</div> <div> <div>61</div> <div>62</div> <div>63</div> <div>64</div> <div>65</div> <div>66</div> <div>67</div> <div>68</div> <div>69</div> <div>70</div> <div>71</div> <div>72</div> </div> <div> <div>TRANSFERRED</div> <div> <div>73</div> <div>74</div> <div>75</div> <div>76</div> <div>77</div> <div>78</div> <div>79</div> <div>80</div> <div>81</div> <div>82</div> <div>83</div> <div>84</div> </div> <div> <div>UNEMPLOYED</div> <div> <div>85</div> <div>86</div> <div>87</div> <div>88</div> <div>89</div> <div>90</div> <div>91</div> <div>92</div> <div>93</div> <div>94</div> <div>95</div> <div>96</div> </div> </div> </div> </div></div></div>									
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ANALYSIS OF LABOR TURNOVER

various methods suggested by Mr. Fisher and others shows that the remedies for too frequent turnover may be conveniently classified in eight divisions, as follows:

- a. Establishment of Employment and Service Department
- b. Adequate Wages and Reasonable Hours
- c. Physical Efficiency
- d. Improvement of Plant Environment
- e. Scientific Management
- f. Industrial Education, and Promotion
- g. Regularization of Industry
- h. Americanization

The need of an employment department in every well-managed plant to take the place of haphazard hiring, no longer admits of discussion. President E. M. Hopkins of Dartmouth College express himself as follows on this subject:

Progress has been so definite along this line that it is becoming the exceptional thing, among the conspicuously well-managed concerns, to find those which have not established functionalized employment departments. There is not a city in the country in which there is not a considerable number of companies of the first importance which have accepted the principles of employment work as of fundamental importance.

The difference, however, between the number of firms that have incorporated in their working plan a standardized employment and service department co-ordinate with the financial and sales departments, and the rest of the firms in any industrial centre, which are still struggling along on the eighteenth-century plan of engaging workers at the gate,

measures the length and breadth of the field of progress ahead of us. The opportunities for industrial service in this field are certain to be extensively developed within the next decade, particularly through the agency of the employment managers' associations that are gradually springing up in the various centres.

Each of the most important employment departments now in running order, such as the one in the Fore River Ship Building Corporation, is combined with a service department. It goes without saying, that after men are hired they are obliged to make all kinds of adjustments. They must be properly introduced to the plant and to the new community. Service along these lines is now being rendered by the well-managed Fore River employment department, which is properly located in the so-called "Service Building."

Having been definitely engaged, and properly acclimated to his new work, the employee's next important consideration is that of the pay and the hours of labor. These two factors always stand out most prominently in the mind of every wage-earner, irrespective of the service or the welfare work of any firm, however well-intentioned the firm may be. These factors will determine whether a man will stay with the firm, and, if he stays, how long he will remain. Hence their importance—not only to the employee, but to the employer—as remedies for reducing turnover. Mr. Fisher, with remarkable social insight and vision, insists that one of the most fundamental of the remedies for too frequent labor turnover is the

payment of an adequate wage. "By an adequate wage," he says, "I don't really mean a minimum wage; I mean a good fat wage—one that will clothe, nourish and educate" a worker's wife and children and other family dependents, as well as himself. It is not now fully recognized in industry that even the average girl has dependents to look after, and that unless society deliberately chooses to break down these family ties industry and business must be made to see that wage-earners, both men and women, must receive a wage that will enable them to meet their social obligations to their kith and kin, as well as to attend to their personal needs.

Moreover, in deciding upon an adequate wage the employer must take into account the cost of living in his particular community. It is obvious that an increase of 10 per cent to wage-earners means nothing if the cost of living is at the same time increased 20 per cent. Unfortunately, however, the situation is such that Josh Billings' statement about the weather is fully applicable to it; namely, "We all talk about it, but nobody seems to be doing anything." Mr. Fisher, therefore, insists that it is the business of the employment departments to study the cost of decent living, to give special attention to money troubles that affect workers, to discount their debts, and to enable them to fight off all habits that stand in the way of thrift and husbandry. But the supreme problem to be dealt with is that of the cost of living. Minimum wages and maximum prices are at this moment playing battledore and shuttlecock so fast that no employee can keep up with the game. Rea-

sonable wages, and reasonable prices based on such wages, alone, will insure industrial peace.

The fixing of reasonable hours of labor is also a matter of fundamental importance. They used to be demanded in the name of humanity; they are now demanded for the sake of output as well. All munitions factories in England have instituted rest periods and shorter working hours, as we have seen elsewhere, to secure larger output, entirely irrespective of the humane phase of the question.

Engineers, and executives closest to the men are now in a better position to convince employers of the real merits of the eight-hour day than the labor-unions, which formerly adopted it merely as a right. Without raising any question concerning rights, it is well to recognize the fact that the employers who introduced the eight-hour day, did it as a duty, not only to workers, but to themselves and the efficiency of their plants.

Physical Efficiency.—The taunt formerly hurled against employers, that men are used merely as tools, and not as human beings, is happily no longer true of many employers. Most of them are showing an increasing concern for the health and well-being of employees, because they have found that such a policy pays. Well-managed plants, therefore, maintain at least one doctor and one nurse on their staff, whose business it is to look after the physical efficiency of the force. A worker in good health is neither a shirker nor a quitter. He stays on the job as long as he is in good health, and earns a living wage. The doctor and the nurse help him overcome

minor ailments and incipient troubles. Moreover, they have a preventive function, to anticipate health troubles to and remove their causes. The nurse, accordingly, visits the home as well as the plant. Once in the home, she is in a position to make suggestions about food values, and if the worker follows these suggestions he may be enabled to attain success in his industrial career. It is also in the interest of the health of the worker that many factories maintain their own restaurants, an athletic field under proper supervision, and a vacation home.

Improvement of Plant Environment.—It goes without saying that it would be folly to do all this for the health of the worker, and at the same time ignore the causes within the plant which make for ill health and physical breakdown, and eventually for discharge and the “scrap-heap.” Factory engineers are therefore working diligently nowadays to make the plant environment safe for health.

The chief of the Bureau of Hygiene and Sanitation of the New Jersey Department of Labor makes the following comments on this subject of plant environment:

Next to the questions of wage and hour, no factor contributes more to the reduction of labor turnover than that of hygienic surroundings. Fresh air affects both output and wages, the requisite of the employer on one hand, and the employee on the other hand. Plant ventilation, both natural and scientific, is therefore in the A, B, C column of factory management. So is dust removal. Just now, when dust and fumes charge the air of most factories making ammunition, the matter of their removal is more important than hereto-

fore. Dust-laden air may contain the germs of disease certain to lay low the worker below par. Lighting, too, with the possibility of eye strain, is an important health factor in many industries requiring close application. As a matter of decency, washing and dressing facilities are now regarded essential to a well-managed plant. The man who emerges from a plant germy and sooty is anything but the right kind of advertisement of the firm. If he lives an hour from the plant, he is bound to continue to be uncomfortable for another hour. A shower would not only protect him against the dangers of dust and dirt and poisons, but would invigorate him and send him home with greatest satisfaction. The products of the factories are often put in glass cases. The human being is as fragile as the product of any factory. Employers are learning to handle man as intelligently as they handle material and machines.

Scientific Management.—Labor turnover, another phase of human engineering, in a sense represents a reaction against the mechanical study of scientific management, in which too often the human element is ignored altogether. Perhaps it is more correct to say that scientific management is concerned with the human element only as an element of production—not for its own sake. In its best sense, however, scientific management means the union within industry of science and co-operation. Co-operation, while it still enters the factory at the back door, will eventually restore the human element in industry, which excessive competition drove out in the eighteenth century.

Humanized scientific management can be of great assistance in the reduction of turnover. Human effi-

ciency, more certain than anything else, will keep the peace in American industry. The military regime of the factory may produce military efficiency, but it is worth while to note well the facts that Mr. Morris L. Cooke, himself a consulting engineer, has set forth effectively: "That military efficiency consists largely in the ability to mass the greatest possible strength at a given place, at a given moment. Industry, on the other hand, struggles rather for steady performance. Peaks and depressions in either demand or output in industry, are to be regretted. The 'Supreme moments' of the battlefield are tabooed, and spectacular campaigns rarely result in permanent improvement."

Industrial Education and Promotion.—Promotion through industrial education—either within the plant or outside the plant, but in either case closely connected with its requirements—is another important remedy for too frequent labor turnover. Education inspires the worker with purpose and ambition. A well-earned promotion as a result of educational effort, gives the worker a new "lease of life." The industry that gives its employees the opportunity to advance themselves is therefore "on the American plan."

Both the states and the nation have recognized the importance of industrial education for the youth of the land, the novices of our industrial army. The rank and file of the army, even its veterans, also need industrial education, since it is never too late to learn. Employers who are providing facilities, even during working hours, whereby their employees

may gain a technical education, find that they are well repaid in the end. The National City Bank of New York is a conspicuous example of this liberal policy of education.

Regularization of Industry.—But ignorance in industry is no greater handicap than unemployment. The labor turnover in any industry in which unemployment prevails, is bound to be high and costly. It is important to realize that the cost will be just as much due to the rush season as to the slack season. Unfortunately, many industries are still suffering from seasonal handicaps, such as the “busy” season, the “slack” season, and the spring, summer, fall, and winter styles. There is therefore a well-defined demand for the regularization of industry. The organization in this country which has rendered the greatest service to this movement is the American Association for Labor Legislation. Accordingly, I present a summary of its practical program for the reduction of future unemployment in America, through regularization of industry, in the belief that wherever it is put into effect it will reduce local unemployment and shut-downs, and consequently labor turnover.

REGULARIZATION OF INDUSTRY

1. Reduction of fluctuations in employment inside the shop by
 - a. Systematic transfer of workers between departments.
 - b. Employing all on part time, rather than laying off part of force in seasonal occupations.

But part time work may be reduced to low point or abolished by—

2. Regulation of output by
 - a. Forward planning based on careful record-keeping.
 - b. Building up slack season trade by
 - Urging customers to place orders for dull season
 - Special advertising
 - Making advantageous offers (low prices, cheaper lines)
 - Giving up profits when necessary, in order to keep organization together.
 - c. Making to stock in slack season where goods are not perishable. This may be done more than it has been, even where style is an important factor, by making staple styles in slack time, and by following a conservative style policy. Here is the added advantage of being able to supply goods immediately on order.
 - d. Seeking steady, rather than speculative business.
 - e. Careful study of market conditions, and adjustment of business to take advantage of them; working for a broad market and diversity of customers; combining wholesale and retail trade.
 - f. Developing new lines and complementary industries.
 - g. Overcoming weather conditions (e.g., the brick industry), where artificial drying has made it a twelve-months' instead of a six-months' industry.
3. Co-operation with other employers, by which the following results may be secured:
 - a. Development of plant and machinery far beyond normal demand rendered unnecessary by the dis-

- tribution of excessive orders among other firms.
- b. Disorganization of production due to cut-throat competition prevented, and opportunity given for constructive agreements (e.g., agreements to restrict extreme styles and other excessively competitive factors).
 - c. Separate reserve of labor for each plant made unnecessary by agreement to take laborers from a central source. (Public labor-exchange.)*

Reducing Turnover Through Americanization.—

Finally, it must be remembered that the most frequent labor turnover takes place among the unskilled immigrant groups. These groups form the backbone of some of our most vital industries, even of our war industries. Upon them depend the maintenance of railway trackage, and the construction of our highways and of our military defences. These important works are in the hands of men, many of whom neither, are not citizens of the United States nor speak the language of this country. In view of our present international situation, immigrant centers and industrial plants depending upon them must inaugurate a program of Americanization in the interest of national defence, if not purely in the interest of labor turnover. Its bearing on turnover may best be discerned from the following facts supplied by the Ford Motor Company. As a result of its Americanization program, it has reduced the labor turnover to a remarkable degree. In 1913, 52,000 entered the company's employ and 50,000 left. But from June, 1915, to September, 1916, over twenty-

* See "Out of Work," by Frances Kellor, p. 552 (1915).

five thousand entered and only about seven thousand left. The number of daily absentees, also, has been decreased to a considerable extent.

Americanization is an immediate problem. America is short of men. There are three jobs for every two able men. The calling of additional men into the army and navy takes workers away from industry. Our only reserve consists of women, many of them foreign-born, who must be Americanized to take men's places effectively. This reserve must be made more effective by increasing the efficiency and reducing the waste in the present employment of foreign-born workmen. There will be an enormous shifting of workmen. Railroad work, and the unskilled work in industries upon which our defence depends, must be entrusted only to loyal Americans, and enemy aliens must be transferred to less vital industries.

APPENDIX TO CHAPTER IX

HOW TO REDUCE LABOR TURNOVER.*

1. Preliminary Measures.

- a*—Attempt to learn true cost of turnover in your plant in order to know how much you can afford to spend to eliminate it.
- b*—Keep adequate records as means of analysis of sources and causes of turnover.
 - (1)—Historical and statistical record separate for each employee including date of employing or transferring, rates, earnings, bonuses, defective work, complaints by or against man, absence, tardiness, periodic certification of foremen, date of quitting and reasons.
 - (2)—Turnover by departments, by causes, by weeks and months and years, and by classes of skills.
 - (3)—High and low earnings by departments.
 - (4)—Defective work by departments.
 - (5)—Absenteeism and tardiness by departments.

2. Fundamental Remedies.

- a*—Hire the right men for the jobs.
 - (1)—Work up good application list which is a “prospect file” by vigilant search of

* This scheme, prepared by Boyd Fisher, is intended to be complete, and is therefore impossible of universal application

sources of supply, by industrial census of your vicinity, by courteous and hospitable treatment of applicants at all times, and by getting a good name for your factory even from men who have quit you.

- (2)—Using your present work force as a “prospect file,” co-operate with agencies for industrial education, supplementing them with apprenticeship training, to build up a system of promotion and transfer.
- (3)—Secure time to examine new applicants thoroughly by receiving advance notice of need and by using adequate assistance in employment department.
- (4)—Hire in accordance with written specifications for each job, prepared at leisure, and after due consultation and criticism.
- (5)—Prepare a definite scheme of direct examination for each type of work, using as much of the character reading methods as your experience approves.
- (6)—Examine physically with view both to general fitness, to suitability for specified job, and to need of later up-building.
- (7)—Visit homes of desired applicants.
- (8)—Check up records of previous employments.
- (9)—Hire only those who can earn an adequate wage.

b—Pay an adequate wage.

- (1)—Study cost of and facilities for decent liv-

ing for each workman and use results in setting base rates.

- (2)—Give special study to cases of inefficient workmen, to see if money troubles are affecting them.
- (3)—Centralize and pay off at discount, debts of overburdened workmen.
- (4)—Promote mutual aid association.
- (5)—Establish legal aid bureau.
- (6)—Pay weekly.
- (7)—Discourage alcoholism.
- (8)—Instruct in proper use of income.
- (9)—Encourage thrift and home-building.
- (10)—Where special causes for increased living cost obtain, attack them, as by co-operative stores, housing measures, etc.

c—Provide steady work.

- (1)—Give piece workers steady flow of material during the day, by proper scheduling system.
- (2)—Regularize production throughout the year to minimize lay-offs and shutdowns.
- (3)—Abolish the annual physical inventory, in favor of perpetual inventory with continuous checks.
- (4)—Make repairs promptly and provide a sufficient reserve supply of tools.

d—Don't fire hastily.

- (1)—Check up foremen whose departments show high turnover records through men's quitting.

- (2)—Don't let foremen discharge at all.
- (3)—Give unsatisfactory men at least one chance through transfer.
- (4)—Establish employment committee to review cases of discharge where men appeal.
- (5)—Establish foremen's club to study ways of getting along with men.
- (6)—Interview, before paying off, men who quit voluntarily.

3. Supplementary Remedies.

a—Start new men right.

- (1)—Make clearly understood agreement as to starting pay and schedule of advances.
- (2)—Introduce new men to bosses, to fellow workers, and to physical surroundings, and acquaint with rules and facilities of plant.
- (3)—Instruct men thoroughly in new task.
- (4)—Advance money or meal tickets to beginners short of funds.
- (5)—Help beginners speedily to get on piece or bonus rates.

b—Promote physical efficiency.

- (1)—Establish physical department.
- (2)—Examine all workmen periodically and provide machinery for following up those found to be defective.
- (3)—Provide adequate light, heat and ventilation.

- (4)—Reduce noise, dirt and noxious odors and fumes.
 - (5)—Purify oils, waste and other supplies.
 - (6)—Purify drinking water.
 - (7)—Provide sanitary lockers, wash rooms and toilets.
 - (8)—Insist upon good teeth and good eyes by using, at least on part time, the services of a dentist and an oculist.
 - (9)—Have nurses or doctors visit those kept home by illness.
 - (10)—Provide mid-workday meals at plant.
 - (11)—Provide good tools and fatigue minimizing equipment.
 - (12)—Shorten work-hours while securing fair output.
 - (13)—Provide at least three rest periods during the day.
 - (14)—Arrange for yearly vacations with pay for all employees. This can be on the basis of an efficiency record or punctuality record.
 - (15)—Promote athletics.
- c—Foster good habits.
- (1)—Investigate causes of unexcused absence.
 - (2)—Fix strict penalties for tardiness and unexcused absence.
 - (3)—Bonus regular attendance.
 - (4)—Establish pay system that encourages and rewards accuracy, high output and punctuality.

d—Give all employees a hearing.

- (1)—Hear complaints at all times, no matter how put forward.
- (2)—Hold regular shop meetings by departments and by divisions to hear men's ideas.
- (3)—Establish system for considering written suggestions from men; and rewarding with commendation, prizes, or promotion, all thought worthy, and acknowledging all such suggestions without exception.
- (4)—Encourage all forms of self-directed organization, whether of athletic, social, or co-operative enterprises—and provided such organization is not subject to the orders from persons outside of your plant and contrary to its interests.

e—Make work in your plant a sufficient career.

- (1)—Establish system for granting unasked-for pay increases as deserved.
- (2)—Discover ambitions of men for future transfers and promotions.
- (3)—Help train men to new tasks.
- (4)—Transfer with some liberality.
- (5)—Encourage men to improve general education by reimbursing for outlay on courses of study as completed.

f—Provide for future of all workmen.

- (1)—Purchase group insurance for all workmen.

- (2)—Pension disabled or superannuated employees.
- (3)—Share profits on some form of stock-sharing basis, possibly in lieu of pension scheme.

4. Provocative Remedies.

- a*—Fire when other methods clearly fail.
 - (1)—Those with chronic social diseases.
 - (2)—Those whose morals menace the high standards of fellow employees.
 - (3)—Those who persist in agitation.
 - (4)—Those who will not quit drinking.
- b*—Submit all such discharges to appeal committee on which employees are represented.

CHAPTER X

SERVICE FEATURES

Definition of Terms.—"Service features," as I have called them, are what generally comes under the head of so-called "welfare work" or "industrial betterment." While it is true that the activities which I shall describe are for the welfare of the worker, the term "welfare work" is commonly in disrepute because of notorious mistakes made by employers in carrying on such activity. For example, in many instances employers have instituted club rooms, rest rooms, baths, lunch rooms, and similar features, with the idea of furnishing special attractions—and making the wages low. Or they have adopted these benefits as "advertising"—a common and costly mistake. Or they have directed their charitable efforts toward making unionism unattractive by attempting to offer more advantages to prospective employees than the unions could.

All efforts directed toward industrial betterment are doomed to failure if they have not as their basis, first, a fair wage; second, a genuine desire on the part of the employer to provide his employees with all the requisites of a well-equipped, modern plant; third, the principle that workers hate to be patronized, that they object to paternalism on the part of

the employer, that they want self-government in their social activities.

The reader will notice that we say "requisites of a well-equipped plant." This phrase implies the reason for rejecting the term "welfare work." The activities discussed in this chapter are, or should be, as much a part of the plant as the fixtures and machinery. They are as essential as the plant itself. They constitute the conditions of work. They determine the place of the employer in the eyes of the world. They fix the kind of service that the employer renders the public through the increased efficiency of his workers.

One writer sums up "welfare work" to mean "all that employers do for their workmen aside from compliance with the letter of the law and aside from the terms of simple wage contracts." It consists of plans and arrangements for the personal and social betterment of the worker. The matter is very well described by a certain English employer:*

One inevitable result of the growth of large industrial concerns has been the loss of the possibility of any real personal relationship between the employer (whether a single individual or a board of directors representing shareholders) and the great mass of the employees. Where the employees number several thousands, it is manifestly a physical impossibility for the employers or directors to be in personal touch with them all. Those employers, therefore, who recognize that their responsibility toward their employees involves duties beyond those realized through the medium of the wage office,

* U. S. Bureau of Labor, Bulletin No. 222. Welfare Work in British Munition Factories, p. 23.

have to seek to fulfil these obligations by other means. This has led to the establishment, in not a few large factories, of an organized system of what is called social, or welfare, work, carried on by specially trained men and women, whose main duty is to humanize industrial conditions of life, and to foster and keep alive those right relationships which are the basis of a well-ordered and harmonious community. The best welfare work that can be done is for the employer to see that the conditions of labor are satisfactory as regards wages, health conditions in workrooms, and the considerate treatment of employees by their immediate superiors. These are essentials upon which, as a basis, any system of welfare work must be founded. If the welfare workers have the confidence of the employees, and are always in touch with them, they will naturally be the medium whereby matters occasioning dissatisfaction or misunderstanding can be investigated and put right. By suggesting and advising upon improvements in conditions of work that may be helpful on the business side, by initiating and supervising recreative and other clubs, societies, and classes, by visiting the sick, by endeavoring to foster the spirit of good fellowship amongst all grades of employees, and by being ready to give advice and assistance in matters affecting individual employees, personally and privately—by these and other methods, welfare workers may find means of giving practical effect to the desire of employers to realize their obligations toward their workers.

The "Service Director."—The growth of service work in corporations has been accompanied by the development of a new profession—that of the social worker in industry. The names by which such a worker is variously known, are "social secretary," "industrial secretary," "welfare manager," "service director," and others. Of these I prefer the last as

representing enlightened thought with respect to this subject. It does not smack of charity or philanthropy; it conveys the idea of one of the ordinary functions of a business—service—and service, as I have stated, is an integral part of business organization.

The duties of a service-department director are manifold and difficult. They demand patience, tact, good will, knowledge of human nature, keen insight into the social and industrial needs of the times, and, above all, the ability to help workers help themselves. This last requirement calls for sympathetic contact with the employers and their problems.

The Committee on Welfare Work in the British Munition Factories defines, in the following manner, some of the duties of the welfare supervisor, as they choose to call him:

(1) To be in close touch with the engagement of new labor, or, when desired, to engage the labor.

(2) To keep a register of available houses and lodgings; to inform the management when housing accommodation is inadequate; and to assist workers seeking accommodation.

(3) To ascertain the means of transit used, and the length of time spent in traveling; to indicate the need of increased train, tram, or motor service; or to suggest modification of factory hours to suit existing means of transit.

(4) To advise and assist workers in regard to feeding arrangements; to investigate the need for provision of canteen facilities, or any inadequacy in the provision already made; and to supervise the management of such canteens.

(5) To investigate records of sickness and broken time arising therefrom; and in cases of sickness to visit, where desired, the homes of workers.

(6) To investigate and advise in cases of slow and inefficient work or incapacity arising from conditions of health, fatigue, or physical strain.

(7) To consider, particularly for delicate and young workers, all questions of sanitation and hygiene affecting health and physical efficiency, and to supervise the conditions of night work, Sunday work, long hours, and overtime.

(8) To advise on means of recreation and educational work.

(9) To investigate complaints, and assist in the maintenance of proper discipline and good order.

(10) To keep in touch with responsible organizations having for their object the promotion of the welfare of the worker.

The duties here outlined are chiefly concerned with matters of health and individual welfare, which are of immediate urgency today. They are distinct from those usually entrusted to a trained nurse or medical staff engaged to render first-aid or subsequent treatment in cases of accident and sickness, though in exceptional cases some of them might be properly undertaken by the nursing staff, increased, and if necessary reorganized, for this purpose. The advantage of bringing the work of the nurse into touch with that of welfare supervision is manifest.

Among the firms in which the social secretary, or welfare worker, is employed, may be mentioned the following: Westinghouse Air Brake Company; H. J. Heinz Company, Pittsburgh; Ludlow Manufacturing Associates, Ludlow, Mass.; International Harvester Company, Chicago; Wm. Filene's Sons Company, Boston, Mass.; Curtis Publishing Company, Phila.; Clothcraft Shops, Cleveland; and John Wanamaker's stores.

So effective is this kind of work in creating an atmosphere of contentedness and enthusiasm, that employers are spending large sums to maintain it. Marshall, Field and Company, the great Chicago merchants, devote an entire floor to employee activities. Firms like the United Shoe Machinery Company, the Fore River Shipbuilding Corporation, Quincy, Mass., and others, have given over entire buildings to betterment work.

Mutual-Benefit Associations.—One of the most popular, as well as one of the most desirable, forms of industrial betterment work is that conducted by the associations of employees for mutual benefit. The general object is to aid members in the event of sickness or disability, and to help the families if death removes their bread-winners. Such an association is supported by contributions from employee members, and often the firms also give financial assistance. In some firms, all employees are required to join the association; their fees are deducted from their wages. In some companies, these associations have certain membership requirements, with respect to the age of the applicant and his period of service. Sears, Roebuck & Company's association insists that any one, to become a member, shall have served the company at least three months, and that he shall be less than fifty years old, and of sound moral character.

Small initiation fees are sometimes required of applicants for membership. The fees which members must pay vary with different companies. The United States Steel Corporation instituted, in 1910, a voluntary plan for the benefit of all employees injured

and of the families of employees who met their death while in the employ of the subsidiary companies. the company contributes the entire amount of the fund. This plan is not utilized, however, where workmen's compensation laws are in force. Its features are similar to the provisions of the compensation laws, although the plan went into operation before compensation laws were adopted so generally in this country.

In the Solvay Mutual Benefit Society (Solvay Process Company, Syracuse, New York), the men and the company pay equal amounts into the treasury. The Society employs its own physician, who handles all cases of sickness or accident. Weekly indemnities are paid for a long period in the case of sickness and accidents suffered by those off duty. Weekly indemnities were paid until the Workmen's Compensation Act became a law. The rules of the Society were altered so as to omit the obligation to compensate employees who were injured while on duty. A funeral benefit of \$100 (the amount generally paid) is provided by the Society upon the death of a member; if the wife of a member dies, \$50 is paid for this purpose.

Applicants for membership in this Society must undergo a physical examination. The Board of Trustees, which controls the affairs of the organization, is elected by the employees—with the exception of the Treasurer of the Board, whom the Company selects. He is ex-officio member of the Board.

Since the organization of the Society, in 1888, over \$500,000 has been paid out in benefits. The Company

pays the hospital expenses of its injured employees, and provides for specialists when necessary.

In Sears, Roebuck & Company, the members of the Mutual Benefit Association pay monthly dues ranging from 30 to 60 cents, according to the class to which they belong. Classes are determined by the amount of wages received. The following table shows the apportionment:

Class	Member Receiving Salary per week	Pays per month
1	\$7.00	30c.
	7.50	
	8.00	
2	8.50	35c.
	9.00	
	9.50	
3	10.00	40c.
	10.50	
	11.00	
4	11.50	45c.
	12.00	
	12.50	
5	13.00	50c.
	13.50	
	14.00	
6	14.50	55c.
	15.00	
	16.00	
7	or over	60c.

Any member who leaves the employ of the company for any reason, is entitled to only the benefits accruing up to the time he leaves.

Among the by-laws is one to the effect that benefits cannot be received unless the member has been

in the association at least 10 days. Membership is effective from the first day of the month for which dues have been paid. Members who are taken ill or otherwise prevented from attending to duties must notify the Secretary not more than twenty-four hours after they are incapacitated.

There is a provision that any member who becomes disabled through dissipation, or immoral conduct, or "undue carelessness—such as wrestling, fighting, or hazardous exercise—shall not be entitled to benefits or relief." A member who has a chronic disease or ailment before entering the Association, is debarred from benefits for disability resulting from such disease or ailment, nor may the family receive any benefit in the event of his death. There is a committee whose express duty it is to visit members who are sick or disabled.

If a member is disabled for more than three consecutive working days, his benefits are as follows:

Class	Receiving Salary of	Weekly Benefit	Death Benefit
1	\$7.00	\$5.25	
1	7.50	5.50	
2	8.00	6.00	\$75.00
2	8.50	6.50	
2	9.00	6.75	
3	9.50	7.00	
3	10.00	7.50	
3	10.50	8.00	100.00
4	11.00	8.25	
4	11.50	8.50	
4	12.00	9.00	
5	12.50	9.50	
5	13.00	9.75	
5	13.50	10.00	125.00

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6	14.00	10.50	
6	14.50	10.75	
6	15.00	11.25	
7	16.00		
	or over	12.00	150.00

Members who attempt to practise fraud upon the Association, are expelled and may not be re-admitted. Members drawing benefits who have to leave the city on account of sickness or disability, must weekly show a physician's report concerning their condition.

In Chapter XIV will be found the form of application to be used by a prospective member.

The B. F. Goodrich Company, Akron, Ohio, provides that all employees on the factory payroll who become ill or receive injury not covered by the state or Federal compensation laws, will be paid "Disability Compensation," provided that: (a) they have passed a physical examination; (b) they give notice of the disability within 24 hours after its occurrence; (c) the disability lasts more than seven consecutive days; (d) if required, they go through a physical examination conducted by the company's Director of Health.

Compensation for a period not exceeding a year is paid as follows:

Women, married men, and single men, who contributed regularly to the support of dependents receive two-thirds of their weekly wage as averaged for the three months preceding disability. Single men without dependents receive half their pay.

The Company makes special provision for disability due to pregnancy, on the following conditions, viz.:

The woman must be married, and must have been employed by the company for one year preceding confinement. She must have refrained from work for eight weeks preceding confinement, except in "premature" cases certified to by the Director of Health. She must be attended by a registered physician during confinement, and the disability must not exceed thirteen weeks.

The company grants no compensation when a worker's disability is a result of military or naval service in war times, aeronautics, use of alcohol, stimulants or narcotics, immoral conduct and venereal disease, or accident or injury received in a saloon or a disreputable resort. And in no case may employees incur financial obligations against the compensation they are to receive.

The Mutual Relief Association of the United Shoe Machinery Company, Beverly, Mass., gives each member assistance during illness or when injury occurs. The sum of \$200 is paid upon death.

The Norton Company, Worcester, Mass., manufacturers of abrasives, have a mutual benefit association which was organized in 1892. The dues are 40 cents a month. Initiation fees vary from \$2 to \$5, according to the age of the applicant. The sick benefit is \$6 weekly for ten weeks.

Hospitals and Clinics.—A significant feature of service work for employees is the plant hospital, an absolute necessity where hazardous work is being done, and a desirable thing in all factories of appreciable size. The hospital or clinic where minor injuries can be treated has saved more than its cost

to the employer. A scratch, if neglected, may develop into blood poisoning, and possibly may cause death. Employers cannot well afford to assume the financial responsibility which these results entail—hence the efforts of intelligent employers to prevent serious consequences from injuries, by means of proper first-aid work, minor surgical operations, and preventive work.

Excellent hospitals are maintained by the Gary Steel Corporation, at Gary, Indiana, the H. C. Frick Coke Company, and other subsidiaries of the United States Steel Corporation. The National Cash Register Company maintains a hospital with two nurses and a physician. The National Carbon Company has a similar arrangement.

Smaller plants maintain clinics or dispensaries for the treatment of all but serious accident cases. Such clinics are maintained by the large department stores of the country and are used by the customers as well as by the employees. In some firms the medical director arranges for "health talks" to employees—talks on diet and the proper care and clothing of the body. The regular nurse often conducts first-aid courses.

In some firms we find dental clinics, which are of valuable assistance in the proper maintenance of the working force. The Metropolitan Life Insurance Company has found that such clinics render invaluable aid to the employees. It is well known that many ailments come from neglected teeth, and if employers could work out some arrangement whereby their workers could obtain dental treatment—even if

the clinics were held only once or twice a week (at the plant)—they would find their efforts well worth while and sincerely appreciated. Sears, Roebuck and Company employ two dentists, each of whom devotes half a day to this kind of work. No operating is done, but teeth are examined and short talks on “oral hygiene” are given.

Examinations by an oculist have proved a highly desirable addition to health work in industry. Some firms, like the Kaynee Company of Cleveland, Ohio, (makers of children’s blouses and boys’ waists and shirts), employ an oculist to examine employees regularly. Others make arrangements for outside examination and treatment of their employees at reduced rates.

Closely allied to the work of the hospital or clinic is that of the visiting nurse, whose duty generally is to visit the houses of employees, particularly when illness in the family has been reported, and when, therefore, the services of a trained nurse will be of special benefit. The visiting nurse is of service to employees and their families in more ways than one. She often helps in making the home adopt a new standard of cleanliness and efficiency; she goes, not as an investigator, but as a friend who wants to co-operate. When an employee is absent from work, the visiting nurse should call at his home at once to learn the cause. If the worker is ill, she can aid materially in reducing the period of absence from work—a matter of importance to employer as well as to employee. The man or woman at work may not be normally efficient, because of irregular home

conditions. Here again, the nurse can step in to advantage if she exercises tact and patience.

Visiting nurses are employed by many large corporations. The superintendents and foremen of the South Works of the Illinois Steel Company, co-operate with the nurse in an organization called the "Good Fellow Club." Each member pays 50 cents a month to a fund that the nurse makes use of to relieve distress temporarily until permanent relief is forthcoming. This fund is used for purchasing such things as food, cooking utensils, special diets for the sick, and other necessities.

An example of what the visiting nurse can do is the Household Center at the Duquesne Works of the Carnegie Steel Company. Two nurses give full time to the activities of a social center for girls who are daughters of foreign parents in Duquesne. These girls are taught how to take care of babies as "Little Mothers" should. They are instructed in the principles of household sanitation, hygiene, and cleanliness, in the preparation of food, and in cooking, washing, and sewing. Close contact between the company and the parents is established through the children, and the nurses are enabled to accomplish much in the way of service.

Lunch Rooms.—Modern industry requires strong, healthy workers. The food that a worker eats is an important element in his life. If his food lacks nutritive value, he suffers in loss of power. So the enlightened employer has made it possible for the worker to eat a hot lunch of wholesome food—and to eat it, not at his bench, but under restful and

beneficial conditions. It pays to set aside a light, airy room with simple but attractive equipment, in order that the worker's noon meal may be something more than a "sandwich and a smoke."

The Cleveland Foundry Company furnishes lunch to office employees and factory foremen at an average cost of 18 cents per person. The Commonwealth Steel Company of St. Louis has a "Fellowship Restaurant" conducted by the workmen, where good food and low cost are combined. The average cost of a meal there is 17 cents. Vegetables of all kinds are sold at 3 cents per portion. Meat may be had at 12 cents per portion. The restaurant serves 1200 meals every day. Music is often furnished by the employees' band.

Adjoining the restaurant is a lunch room, where the equipment is similar to that in the main dining room. This room is used by men who prefer to bring their own lunches, and provision is made so that they can heat their food.

The Curtis Publishing Company has unusually attractive restaurants for employees. In one of them, conducted in cafeteria style, 1100 workers a day are fed. In another, in which the counter plan has been adopted, over 1000 are served every day. The average cost per meal is 17 cents, and employees pay about 13 cents. Of the total working force, 75 per cent of the employees take advantage of these restaurants.

A typical menu is the following:

Puree of Tomatoes, 4c.

Roast Beef, Mashed Potatoes,
12c.

Deviled Crab, 10c.

Creamed Chicken on Toast,
12c.

Mashed Potatoes, 4c.	(2) Vanilla Wafers, 1c.
Baked Beans, 4c.	Butter, 1c.
Stewed Tomatoes, 4c.	Wheat Bread (2 slices), 1c.
Macaroni with Cheese, 4c.	Roll, 1c.
Ham or Tongue, with Potato Salad, 10c.	Orange, 2c. and 3c.
Shrimp or Salmon Salad, 10c.	Apple, 2c. and 3c.
Swiss-Cheese Sandwich, 5c.	Tea, 2c.
Ham Sandwich, 5c.	Cocoa, Whipped Cream, 3c.
Ice Cream, 5c.	Bottled Milk, 3c.
Strawberry, 5c.	Grape Fruit, 5c.
Vanilla, 5c.	Chocolate Pudding, 5c.
(2) Spiced Wafers, 1c.	Sliced Pineapple, 5c.
(2) Lunch Cakes, 1c.	Baked Apple with Cream, 5c.

The United States Steel Corporation conducts restaurants at the plants of its various subsidiary companies. One of the most successful is that at the Gary Works of the American Sheet and Tin-Plate Company. It is housed in a brick building, 61 feet long and 38 feet wide. The floors are of concrete. The cost of the building and equipment was \$7300. Floors and counters are scrubbed daily; the ice box and the windows undergo thorough cleansing weekly. Coffee and milk urns are washed out every day, and sewerage lines are flushed once a week. Everything about the system is thorough and efficient. Here are examples of the menus offered:

Soup—Puree Navy Beans.

Meat—Prime Roast Beef; Leg of Lamb; German Pot Roast, Frankfurters and Sauerkraut.

Vegetables—String Beans; Sugar Corn; Mashed Potatoes.

Dessert—Tapioca Pudding.

Soup—Beef Soup.

Meat—Prime Roast Beef; Chicken Pot-Pie; Sugar-Cured Corned Beef; Lamb Chops, Breaded.

Vegetables—String Beans; Mashed Potatoes.

Dessert—Cocoanut Meringue Pudding.

A regular lunch is offered at twenty-five cents.

Refreshment Stations.—These stations are a new development in factory-betterment work. The idea is to supply workers with light refreshments during the day. Most employees have early breakfasts, and naturally about ten or eleven o'clock in the morning their vitality is comparatively low. In fact, most of the industrial accidents of the morning occur about this time, perhaps for this reason. It has been found that this plan has aided materially in increasing the efficiency of workers and in lessening the number of accidents resulting from fatigue.

The Norton Company, of Worcester, has found the stations to be a very popular institution. Milk, butter-milk, and soft drinks are sold at cost. Employees are at liberty to go to the station at any time of the day. The drinking of milk is encouraged, as this beverage helps ward off diseases that attack workers engaged in a dusty trade, like the manufacture of abrasives.

Rest Rooms.—There are generally rest rooms in every modern department store, and they are to be found in many large factories. Workers gladly make use of these rooms, particularly immediately after lunch. The women employees perhaps appreciate them the most.

Club rooms are a very popular institution among workers. If there is a piano or a talking machine, such rooms are of special value to the worker, who may wish to dance or listen to records, to ease the strain of work.

The Pennsylvania Railroad maintains a Y. M. C. A. house for its men. The Ludlow Manufacturing Associates have club rooms, gymnasium, baths, billiard tables, and so on, for employees. The United Shoe Machinery Company boasts a splendid country club, where golf and other athletic activities are fostered.

Libraries and reading rooms are of valuable assistance in the work with employees. Each plant library should contain a special section of books pertaining to the trade or business of the firms, in order that employees in their spare hours may make themselves more efficient for their work. Some firms arrange with the local public libraries of their cities or towns for "deposits" of books, which are changed at stated intervals. This method keeps alive the workers' interest in the collection. Such deposits also encourage employees to become regular members of the public libraries.

Savings Associations.—If for no other reason than that they encourage thrift among the workers, savings associations are extremely desirable. Generally they are conducted by the firms, which pay interest on deposits. Some, however, are operated by the employees themselves. A valuable feature of these associations is the provision for loans, properly safeguarded, which help minimize the "loan-shark" evil. The general charge for loans is one per cent a month.

At the Ford Motor Company employees deposit \$1 a week. Funds may be withdrawn at any time with interest. Loans up to \$20, between pay days, are made by the Association at a nominal charge.

The National Lamp Association, Cleveland, Ohio, has a system whereby employees may authorize deduction from his pay of any amount, however small. When he orders a deduction made, he receives saving stamps, and when he has accumulated stamps to the value of \$1 or more, he may exchange them for certificates bearing 4 per cent interest, compounded semi-annually.

The Jeffrey Manufacturing Company, Columbus, Ohio, manufacturers of machinery, have a Building, Loan and Savings' Association, which is capitalized at \$1,000,000, for the benefit of employees who purchase capital stock in the Association. The purpose is to give employees an opportunity to invest savings and to borrow money with which to purchase real estate, to build, or to make repairs on their houses.

Legal Aid.—Many questions present themselves to employees with respect to their personal affairs regarding which a lawyer's advice is not only helpful but necessary. If the workers should consult an ordinary lawyer (and often they consult an unscrupulous one), the fee would be prohibitive. Some firms have therefore found it desirable to have their regular attorney or a special legal-aid department handle these matters.

At the Ford Motor Company, for example, legal advice is given concerning the purchase of houses and every precaution is taken to prevent the em-

ployees from innocently taking bad title to real estate.

The employees of the Filene store in Boston maintain a "legal clinic," which is in charge of an experienced attorney. Problems involving delicate domestic relations, loan-shark difficulties, and other generally similar matters are adjusted in this clinic. No fee is charged. Employees who consult the attorney on matters that demand part of his regular time, pay for the extra service.

Housing.—The most significant activity in behalf of workers is that which concerns their proper housing. Bad housing breeds disease and discontent, and results in a frequent labor turnover. The benefits of good housing are too obvious to need comment.

According to John Nolen, one of the leading American authorities on housing for the wage-earner, several important points must be given careful consideration if we are to deal effectively with the problems involved:

(1) The minimum desirable house of four or five rooms cannot be provided in the United States, even under favorable conditions, for less than about \$1800 or \$2000: that is, for house and lot, with street improvements, essential public-utilities, and neighborhood recreation. (2) A house costing that sum cannot be offered on the basis of an economic rent of say, 5 or 6 per cent net, for less than \$15 per month. (3) Unless a wage-earner with a normal family of wife and three dependent children has an income of \$15 a week or \$800 a year, he cannot afford to pay as much as \$15 a month for the rent of his house.

Industrial housing, to be a success, must be removed from the field of speculation and placed on a

sound business basis. This is what is being done with notable success by the Norton Company, with respect to the territory known as "Indian Hill." Property is sold to employees for a 10 per cent first payment, and the company holds the mortgage. In 1915, as many as 32 houses were built, and 26 were planned for 1916. Detached houses, each one different from the rest in style of architecture, vary in size from 5 rooms and bath to 7 rooms and bath. The former sell for \$2800, the latter for \$3700. Regular payments of \$14 a month on the \$2800 property, and \$17.25 a month on the \$3700 property, include interest, taxes, insurance, and so on. The purchase price represents the cost of house and land to the company. With a house that costs \$3851, 6850 feet of land is included.

The Westinghouse Air Brake Company, Wilmerding, Pa., has built single- and two-family frame and brick houses, as well as two-flat brick row houses. Many of these are sold on the installment plan.

The American Sheet Steel Company at Vandergrift, Pa., built the entire town. Lots were sold to employees, who built with money borrowed from the building and loan associations.

At Roebling, New Jersey, the John A. Roebling's Sons Company laid out the town eleven years ago, and built row and double houses accommodating 531 families. The designs vary, and rents range from \$5 to \$30 a month.

Other corporations, also, have built houses for their employees which have proved, for the most part, satisfactory. It has been found that the chief defects

are lack of architectural variety, poor construction, and unattractive surroundings.

If the difficulties involved in industrial housing, are to be solved, according to Mr. Nolen, "working men's houses in America, must in the future (1) either be financed and constructed by building concerns or rental associations largely created for that purpose, or (2) be urged or managed by the larger interests of capital, or (3) be built by the individual employer." I have listed these agencies in the order of preference. Formerly, in New England, the employer commonly built the houses for his employees, but they generally proved unsatisfactory either as an investment for the employer, or on the "sanitary, human, and practical side to the tenant employee."

The first plan has proved successful in England, where the "Garden City" idea originated, and also in Germany. The three plans will be more fully discussed in a later chapter.

Athletics.—All forms of athletics should be encouraged. Baseball matches, tennis tournaments, bowling leagues, and annual field days are extremely popular, and they help to create a fine spirit as well as to build a sound body.

The National Cash Register Company maintains a recreation ground equipped with apparatus for gymnastics, as well as a country club, the privileges of which are accessible to employees and members of their families for the nominal charge of one dollar a year. A gun club is also a part of the recreational scheme of the factory.

The Fore River Shipbuilding Corporation has one

of the finest baseball diamonds in New England. Its baseball team goes on tour to meet teams from other companies in the Bethlehem Steel Corporation chain. It is needless to dwell on the fact that athletic teams develop the right kind of loyalty among employees.

The Curtis Publishing Company has what is called the Curtis Country Club of 2000 members, conducted and maintained entirely by the employees. This club is the central social organization of the company. The club house, which is leased from the company, is situated at Laundale, in the suburbs of Philadelphia, on an estate of 154 acres.

Summer camps and vacation houses are conducted by some progressive firms. They possess great possibilities, but they must be carefully managed and supervised if the most is to be made of them.

Musical Work.—We are all more or less musical, even though some of us cannot distinguish Beethoven from George M. Cohan. It is recognition of this fact that has worked wonders with community choruses, in which all take part, including those who have to “follow the tune.” Get the workers to sing at work, and when work is over. It is a great way of persuading workers, especially the women, to express themselves. Organize a chorus, a choral club, or a glee club. Not only will it be appreciated, if there is right leadership, but it will infuse a spirit into the members that will bear fruit in the routine work.

In the cigar factories in Havana, not only do the workers sing while at work, but professionals play and read for their entertainment. The result is a remarkable increase in production. This plan is being

put into effect in many large factories in the United States. Many provide a talking machine with records of good dance music, operatic music, and instrumental solos. The investment more than pays. It is an investment that pays in good will as well as in good work. Of course such a plan is practicable only where there is no noise from machinery; it is most readily effected in handicraft establishments.

Another excellent musical feature is the brass band. It does not take an employee long to learn how to play an instrument, if he is well instructed; usually a firm engages a band leader, who teaches any workers who wishes to join.

The Waltham Watch Company, Waltham, Mass., has an unusually good band. So has the Fore River Shipbuilding Corporation, whose band plays in the yard daily during the lunch hour. As the benefit is coming to be realized, the number of these bands is gradually increasing.

Employees' orchestras are a source of much good. The orchestra of the Curtis Publishing Company holds a rehearsal weekly, and gives a regular concert every few months in the Company's auditorium. Even the soloists are members of the working force.

Dramatics.—In employees' social activities one of the most prominent features is dramatics. Excellent productions of playlets and operettas are no uncommon occurrence. One Boston store last year produced a musical comedy at the Boston Opera House, where 5000 seats were filled at each of the two performances. Employees wrote the words and composed the music. The affair was a tremendous suc-

cess, and still lingers pleasantly in the memory both of the actors and of the audience.

The Basis of Good Will.—There are many other social activities which employers have found it wise to foster. They recognize the following facts: that workers, especially those engaged in work of a monotonous character, must have wholesome diversion; that such diversion will build a better esprit de corps than anything else; and that the recreational activity, to be successful, must be managed by the employees themselves, though with the advice and aid of the employers.

Service work for employees, properly conducted, makes for harmony among the working force. It produces the loyalty which lasts, and it is that loyalty, after all, which is the basis of good will as an economic asset.

CHAPTER XI

THE LABOR EXECUTIVE

Growing Importance of the Personnel Problem.—
The term, employment manager, has come to have as definite a meaning in industry as production engineer, factory manager, superintendent, and other titles used to denote recognized administrative positions in management.

By this we do not mean to imply that there is a perfectly standardized program of duties for the person in charge of the employment and personnel work in an organization. Such standardization can be effected only after years of observation and experiment. But in this connection industry has recognized two ideas which will bear emphasis. One is that the whole problem of personnel management is so important as to call for much more than incidental attention; the other, that a high-grade executive should be in charge of all the interests which may be grouped under the general heading of "The Human Factors" in organization. Moreover, the wide recognition of these ideas has led, in many instances to the making of a large variety of internal organization changes in order to effect a centralization of the human element and of the work, as well as a proper focusing of the workers' interest.

The term, employment manager, is not used in every plant where such an executive is engaged; "service manager" is sometimes used instead. But whatever term may be used, the fact is that the duties of this office are generally familiar, and the employment manager today occupies a decidedly important position.

The modern manager is interested in learning just what a well-rounded plan of employment management involves, and what sort of man would best be put in charge. Throughout the country, associations of employing executives are meeting regularly to discuss the professional problems that they meet in their important and difficult work. These associations are to be found from Boston to San Francisco. As a result of their enterprise and that of great corporations—such as the Fore River Shipbuilding Company, the Curtis Publishing Company, and the International Harvester Company—the program of employment work is assuming a definite form in which it is coming to be of more and more value.

Whether or not a special executive is placed in charge, since the heads of most large concerns are taking an active interest in the employment question an analysis of this kind of work, and of the type of man needed to carry it out, is of the utmost practical value.

Employment Department and Its Head.—At bottom, an employment department specializes in right industrial relations. It seeks to understand the problems that confront the working force, and sympathetically to interpret them to the management, as

well as to establish among the men a feeling of good will toward the management. The connecting link between management and men is the employment, or service, department; the common interpreter is the executive in charge of it. The existence of such an executive does not imply that a substitute has been found for self-initiated activities on the part of the working force. There is no substitute for such activity. Men in groups will more and more undertake programs of work which, in their judgment, best express their own ideals. But it is the duty of enlightened management to learn to co-operate with such initiative, encourage it, and help to benefit the organization and the industry. Repression is a sign of obsolete management. Co-operation, and respect for the desires and ideals of the workers, are signs of modern management. And the employment manager, because it is his special business to learn from the rank and file just what is needed to secure their good will and their good work, is an agent whose services are essential.

Industrial organization has thus far rendered it hard for the workers to make their wants known except through strife, costly to both the men and the industry. Modern managers must learn to understand the growing ambitions of the masses of workers. Only in such understandings can right relations obtain and good work be done.

Knowing the Workers and Their Needs.—One of the most illuminating investigations an employer can carry on, is a study of what the employees read, the lectures they attend, and the schooling they give their

children. Compare this self-education on the part of the workers with the reading, pastimes, and mental diversions of a large proportion of sub-bosses, foremen, and a host of minor executives. The truth is that the modern press, magazines, public schools, and other easily accessible educational provisions for the masses, are changing the viewpoint of the people, deepening their self-respect, and giving them a sense of their contribution to industrial life. Managers, from the most responsible down to the smallest subordinate, must learn to appreciate what modern working men think and desire.

The Employment Manager.—Professor Ernest Fox Nichols, of Yale University, is a profound observer of the new tendencies, and his views on the work of the employment manager are of exceptional importance. I quote here some of his opinions:

The greatest business problem today is the human problem of labor and the wise handling of men. Here lies the greatest opportunity, and also the greatest danger confronting modern business. On the one hand, lie the possibilities of steady production, co-operation, contentment and good will; on the other, the possibilities of strife, of organized social revolt, and even the wrecking of the present organization of industry. . . .

Wrong personal methods of handling employees, not treating them with the respect due to men and women, may cause a large turnover. General discontent, discouragement, distrust or suspicion of the management, lack of a feeling of esprit de corps, lack of friendliness between the employees themselves, failure of the management to show recognition, or advancement, or wage increase for better work, are causes. Then there are certain local causes. Such are just a few of the things that enter into the labor turnover, and a man must

be of great talent and judgment, and human sympathy and feeling, who will devote his whole time, the whole time of a highly trained and sympathetic intelligence, to go through and analyze and find out what is wrong and how it can be bettered.

Let me give you the results of one employment manager. Fortunately, in this case the man who took upon himself the employment function was a member of the firm, so that nothing stood in the way of the policies which, after due examination and study, he settled upon. The business concern is one in the clothing trade, where there has been seasonal employment, where in other shops there is now seasonal employment. In this case the sales policy has been changed. Customers and sellers have agreed to certain modifications of delivery, to their mutual advantage. Certain operative policies have been changed, because of the study of the employment manager of the conditions of employment, and this is what he accomplished. In five years he cut down the annual labor turnover from 150 to 33 per cent. He raised average weekly wages by 37 per cent. He reduced working hours from fifty-four to forty-eight per week. He cut down his average force from 1044 to 865. He increased production 42 per cent.

That sort of thing is not charity. It is not sentimental uplift. It comes out in the balance sheet. The man of that quality, with that standing and authority, whose word will be heard in the management, is the man who can not only improve the industry immediately, or almost immediately, but who can actually increase money earnings, can provide a fixed and steady personnel, can so change conditions that work goes steadily forward with only small seasonal fluctuations, so that the whole plant is used every day and there is no overhead charge carried when nobody is at work.

In addition to all that, he has saved to the industry hundreds of laborers and working people. He has saved the state and

society from the wreckage which comes from unemployment. The same talent applied in your business could do something of the same sort. Perhaps not so much, perhaps conditions are different. But something could be done. That is an extraordinary showing. But some such showing will be possible if it is taken hold of in an intelligent way, and if the man who is entrusted with the function of employment is given a place comparable to that of the production manager, or the sales manager, and has direct access to the general manager or the president, and sits in council with the highest administrative officials, so that he has a chance to counsel changes in operation, policy, changes in sales policy, changes in whatever stands in the way of the greater common good of the industry and the employee alike. . . .

Dartmouth's Manager's Course.—The first attempt at definite training for the new profession of handling men, may be credited to the Tuck School of Administration and Finance at Dartmouth College. In undertaking such a course, the College has followed the trend of the century, which has gradually put a background of training behind one vocation after another. There was a time when engineers, lawyers, accountants, and many other types of professional workers were expected to secure their knowledge through actual practice, especially under some older practitioner. Today we recognize the benefit of organizing existing experience and knowledge for the coming men in the professional callings, although it is admitted that actual life alone can put on the finishing touches.

The Dartmouth course presupposes the employment executive to be a man whose duties range from

the simple interviewing of prospective applicants to the making of administrative decisions involving the most complicated social problems. Three distinctive types of functions are implied in the scheme of preparation:

1. Those functions pertaining directly to the technical productive efficiency of the individual employee. Illustrative of these are:

The selection of the right kind of employee for any of the classified "jobs" of the business; the analysis and classification of the "jobs" making up the business; the training of employees within the plant, or in co-operation with educational institutions; the establishment of records, involving the determination of what they shall contain; the routing, transfer, or interchange of employees; the discipline of employees; the determination and maintenance of proper working conditions; the establishment of wage rates which create "incentive," and so on.

The performance of these functions is accomplished, in some instances, through personal contact of the employment executive with the individual employee, but generally through an organized "machinery" of minor executives. There is involved, therefore, the function of organizing and operating such machinery.

2. Those functions pertaining indirectly to the productive efficiency of the individual employee, or pertaining to the rights of the employee as an economic, even though not a legal,

partner in the business. Illustrative of these functions are:

Consultations, made possible by mutual confidence, and by the initiative of the worker, concerning the personal problems of the latter; the maintenance of hospitals, nurses, physicians, dentists, etc.; the maintenance of lunch rooms, rest rooms, recreation grounds and equipment, and so on; inspiration and assistance in the organization of an employees' co-operative association for various mutual benefit activities, such as the establishment of a co-operative store, a co-operative bank, and so forth.

The performance of these functions is accomplished, in some instances, through personal contact with the individual, but usually through contact with officers and committees of the employees organizations.

3. Those functions pertaining to the largest administrative policies and problems of the business. The best type of employment executive is of as high rank as the works, sales, and financial executives, has as complete and independent access to the office of the president, and has as fully the latter's confidence with regard to problems of the relation between the management and the personnel as they have with regard to the problems pertinent to their respective functions. If there is an executive board made up of the various functional managers, the employment executive is the peer of any of those managers. On

that board he sits in a dual capacity; he represents, on the one hand, the desires and the rights of the working force, and on the other hand, the desires and the rights of the management. He is harmonizer and adjuster. He is the specialist who studies the problems of industrial democracy, organized labor, collective bargaining, employees' consent, and so on, and reports his investigations and conclusions, with recommendations, to that board. The performance of these functions brings him into contact with leaders of the working people, with students of social affairs, and with the highest executives in the management.

It is perfectly obvious that, considering the type of employment executive to be developed, the machinery of training cannot consist merely of one or two collegiate courses of three hours each for half a year. The machinery of training must consist of the entire educational machinery, supplemented by such educational assistance as can be afforded by business firms, employment executives' associations, and vocation bureaus. The one or two specialized courses serve merely to give the final bit of specialized information, to co-ordinate and relate to the objective the larger amount of information acquired in other courses and through experience, and to effect a final comprehension of the specific problems of the employment-management function. The instructor in these courses is like the assembler in the typewriter or cash-register plant, who brings together into a whole, suitable for

a particular service, numerous parts that have been through many preparatory, selective, and fashioning processes.

Personnel Work of Plimpton Press.—The intimate nature of the personnel director's job may be seen in the close follow-up work at the Plimpton Press at Norwood, Mass. It is the purpose of their employment department to tell a new worker, when they hire him, something of the general policies and standards of the company. The candidate is taken to the factory nurse, who questions him in regard to his health, and explains some of the special features of the service department. He is next taken to the head of the department in which he is to work, and the latter conducts him to his place of work, introduces him to those who will be his fellow-workers, gives him a key to a locker, and tells him about any special features it may be desirable for him to know. The first impression made upon the employee is most important; at no other time is his mind so open.

In the Plimpton plant, the group boss in charge of any group of workers, which in practice does not number more than ten, is responsible for all instruction in regard to the work to be taught to the new employee. There are written instructions concerning the performance of all tasks. Responsibility for all other training and education rests with the employment department. In this field of activity, the aim is to help the employee to develop his abilities, to discover latent talents, if they exist, and to make opportunities for exercise of such talents if possible. It sometimes happens that this business does not

furnish the best avenues for future growth; in such instances, the employment department tries to find the right environment for the worker elsewhere.

This department keeps in touch with the newly appointed employees, by interviewing them at least once a month to find out whether they are fitted for their work and are given such assistance as they may need, and to discover how they react to the work. A record is kept of each employee, from the time of his employment. Information in regard to age, education, marriage, parentage, nationality, number of dependents, and previous employment, is obtained from the application blank. Dates of increase in pay, transfer, and so on, together with the reasons therefor, are entered as any changes occur. On the back of the sheet used for this purpose, spaces are provided for entries once every thirteen weeks, for:

- (a) An estimate of the kind of discipline that the worker has maintained.
- (b) His efficiency, as determined, in departments where a bonus is paid, by means of his bonus earnings.
- (c) The name of the group boss in consultation with whom the employment manager has formulated his report.
- (d) The total number of hours constituting that period during which the individual was employed, the hours he was out on his own time, and the number of "bonus hours" to his credit.
- (e) His total earnings, as shown by the payroll. Space is also provided for items which may affect the employee's work—such as home conditions, and so on.

It is with a view to finding out what the average weekly wage per year is for each worker, that this

record is kept. The intention is that it shall show quarterly the exact amount of money each individual has actually taken home. The worker is not particularly concerned as to what his rate per hour or per week may be; the important thing, in his opinion, is the amount he earns over a period of time. A man's hourly rate may be high, and yet, if he has short time, his wages are nevertheless small. Unless actual figures relating to a definite length of time, are periodically brought to the attention of some one whose business it is to safeguard the interests of the employee, many maladjustments of wages will escape even a well-intentioned management, and the sincere, but erroneous, opinion will be that wages are high because rates are high.

It is the custom of the Plimpton management to inform themselves concerning each employee at least once every six months, to ascertain whether or not he is deserving of an increase in pay. If he is, it usually is granted, and the increase continues until the rate equals that of the union scale. If he is not deserving of an increase, he is interviewed and the reasons for withholding the raise are frankly talked over with him.

The authority for final discharge rests with the head of the employment department. Group bosses, or others in authority, may recommend for discharge, and if, upon investigation of the case in hand and presentation of proper data on both sides, it seems desirable that the worker be discharged, it devolves upon the employment manager to dismiss him. If any employee who is to be discharged feels that the

decision is unfair, he may take the matter up with the works manager, but this privilege has never been used. A worker has the right to make a complaint, at any time, to the employment manager or the works manager.

The system of management reduces discipline to a minimum and renders it automatic in its operation. Nevertheless, such matters as require discipline are usually attended to by the employment manager. A joint committee to consider all grievances brought before it, has been found satisfactory. This committee consists of the following members: a union representative, usually the president of the local union; a representative from the department in which the grievance occurs; the works manager, who represents the firm; and the employment manager, who is a "neutral" member of the committee. Many and various subjects are brought before this committee, as for example: whether or not certain piece-workers may do a little extra work during the noon hour; rearrangement of locker rooms; and distribution of work. Questions of pay which are not concerned with union agreements, but merely have to do with a special piece of work, are also brought up for discussion before this same body. So far, all grievances have been discussed and settled on a basis of facts, and to the satisfaction of all the parties concerned. The great benefit resulting from these meetings has been the training of the members to consider questions from the standpoint of facts, rather than from that of tradition or of some one's personal opinion. Once facts are established, there

is seldom any argument as to the right action to be taken.

Realizing that any group in society advances only as its individual members progress, the employment department of the Plimpton Press endeavors to become acquainted with each worker individually. This object is accomplished not only through the routine business intercourse, but by the use of certain other avenues which the department has at its command for getting into close touch with the employees. One important channel is the library, which consists of several hundred books, of nearly every description. Fiction is most sought for, of course, but there is also a demand for books on technical subjects, travel, music, and art. Foreigners are often very glad to be advised in regard to books, and it is frequently possible to indicate to them almost a graded course in reading. Many of them read philosophy, history, and economics, and are grateful for help in the selection of their authors. Others, of course, need a much simpler line of reading, but they also will follow suggestions readily. Technical and trade magazines are sent monthly to those who are likely to be interested in them.

As a result of observation of the faulty habits of diet prevailing among those who brought lunches, the project of establishing a lunch room was discussed with a number of the employees. The idea met with such a hearty response that three years ago a small lunch room was started. Food is served at cost, and, except for the cooking, the service is furnished voluntarily by members of the office force. Prac-

tically no suffering from indigestion now reports to the hospital in the afternoon.

Recreational activities outside the factory are not now carried on. Norwood, where the Plimpton Press is situated, has a civic centre of exceptional excellence, where gymnasiums, swimming pool, bowling alleys, dance halls, club rooms, sewing and millinery classes, and so on, are open to all upon the payment of a small fee.

The Savings Bureau was founded with the object of promoting thrift among the employees, 80 per cent of whom are members. Annual deposits total usually about \$15,000, and the present balance is \$11,000. A depositor is required to pledge a stipulated weekly amount of at least ten cents, but he may deposit as much more as he chooses any week. Withdrawals may be made at any time. Each department has its own collector, and collections are made on the pay day each week. Interest on deposits is paid at the rate of 4½ per cent per annum. With the help of this Bureau many workers save money for their insurance, rent, and other periodic expenses, and for vacations and Christmas. Depositors may borrow sums not exceeding \$100, upon furnishing proper security. When employees have fallen victims to loan sharks, or have bought unwisely on the installment plan, it has often been possible to make arrangements for them to pay off these debts by means of weekly deposits in the bank. At the same time, they learn something about thrift which will stand them in good stead.

As an example of the kind of work that has been

done through the agency of the bank, the following illustration may be of interest. A man who has been employed for a number of years, and whose work was proving more and more unsatisfactory, finally had three assignments upon his wages come in almost simultaneously. When the matter was taken up with him—in an effort to make an arrangement so that he could obtain releases by paying into the bank a small amount of these assignments weekly—he finally disclosed the condition of his home finances. He was very heavily in debt, and was endeavoring to pay about twenty back bills, which covered a period of at least five years. Much of his money had gone foolishly, some of it for liquor, and both he and his wife were in a hopeless state of mind.

They were advised frankly, but kindly, what course to follow, and they realized the wisdom of the advice. The result was that they put away something weekly in the bank for all monthly expenses—such as rent and insurance—and something toward all back bills. In a year's time, the man had paid two-thirds of his debt, and his work had improved so much that he had been given two wage increases. He is now considered one of the best workers in his department. Although not an habitual drinker, he had been in the habit of "celebrating" on holidays. But now new interest in his family affairs and expenses replaces his desire for occasional dissipation.

Qualifications of Employment Executive.—From a study of the foregoing descriptions of personnel managers in action, it will be clearly appreciated that here is a task that calls for common sense, sympathy,

human insight, intelligence, and training. Another qualification may well be added—courage. The weakling in this position will discredit himself, his employer, and the position itself.

No establishment should dream of engaging an employment manager, unless it is prepared to respect his work and his judgment. Because of his peculiarly close contact with the working force, it will sometimes happen that the advice the employment manager gives may go contrary to certain preconceived opinions of his superiors. But a wise official will welcome a judgment contrary to his own if it is based on superior opportunity for acquaintance with the facts of the situation. The employment executive should know first-hand the facts involving the human factors in the organization, and it is his business to present them fearlessly. While tact and a sense of proportion are always indispensable, the most important quality of all, and the one to which the rank and file will ultimately attach the greatest importance, is absolute integrity of purpose and statement. And it may be added that the most successful executives are whole-heartedly with the workers in esteeming, above all other things, the ability to learn the truth and tell it, be the consequences what they may.

CHAPTER XII

PROMOTION, TRANSFER, AND TRAINING

“Initiating” the Worker.—Choosing employees wisely, and dealing with them intelligently and in accordance with the spirit of the times, constitutes but a part of the task of management. Once in the plant or establishment, the employee, even though already skilled and experienced, undergoes a process of adjustment. It is one of the big tasks of management to watch this process of adjustment carefully, because only in the actual placement of the employee can there be anything of value learned as to the adequacy of the employment methods used.

Where a cast-iron scheme of assigning men to tasks is in operation, much good human material is lost or misused. A working force cannot safely be looked upon as a fixture like lathes or buildings. Within limits, men in a plant must be regarded as a mobile force, to be adjusted and readjusted in their work places in order to get the most effective relation between them and their work. It is laziness on the part of management to refuse to watch the placement of men; on the other hand, great rewards come to organizations which spare no pains to see that fit men do fit work.

This principle is sympathetically carried out in a

number of important organizations. Oftentimes it is best illustrated in what is called the "initiation of the worker in his job." This initiation involves a brief period during which the new employee is introduced to his fellow-employees, and is shown the various features that he should know, such as wash rooms, location of tools and supplies, lunch rooms, transportation arrangements, and so on. Many an employee has been left to blunder or stumble upon the small items of plant knowledge, an early knowledge of which makes for comfort and ease of adjustment to new conditions. There have been not a few instances in which foremen or others have heaped abuse upon beginners because the latter were unaware of things that were never mentioned or pointed out to them.

The fact is, that management is responsible for the proper initiation of men into their work environment. The more intelligently such initiation is organized, the better will be the prevailing spirit. The process should never be left to fellow-employees or to foremen or others like them in authority.

Consider the questions which confront a new employee in any plant. A humane management, which is also alive to the economic value of good will, would not think of neglecting the golden opportunity to secure the assimilation of the newcomer into the life of the organization. And yet, so simple a matter as this is neglected so generally that the corporations which act differently are conspicuous in this respect.

One great factory in Rochester provides that the first morning of the new employee shall be passed

in a round of visits throughout the buildings. The rules and policies are explained carefully and simply. Fellow-employees are introduced, and an atmosphere of good will and co-operation is created at the very outset. Nothing could buy what a service of this kind succeeds in getting. A few other factories and establishments provide for a brief "pre-work" period of initiation. A silk mill in Connecticut has been experimenting for a long time on an interesting project in this connection. Instead of its being left to various departments to find out, with waste of time, material and effort, how well a new employee can do, new employees are sent to what might be called a junior mill, a "try-out" place, where the typical work of the big plant is reproduced on a small scale. For two weeks the workers are paid—and studied. The result is that when they are finally turned over to a department head, it is with a record of performance behind them. One of the fine by-products of a method such as this is the discovery of a variety of capacities among applicants who may have come for some work which, from the viewpoint of the employer, represents a smaller opportunity for them than what their discovered talent entitles them to.

Sizing up the Men.—To know what men can best do, besides what they may come to do, is today one of the liveliest interests of executives—particularly those in charge of personnel work, such as employment managers, divisions superintendents, and general managers. The Thomas A. Edison Company, in West Orange, does not leave such matters to chance.

In their personnel department there is one of the most complete files of a worker's capacity and experiences anywhere to be found. One practical result of such a record has been the finding of men within the organization to do certain special or unusual jobs, when emergency has arisen. Customarily, since there are no such accessible records in the average plant, a long and costly search has to be made outside for special sorts of skill, or for men to meet certain new conditions.

On the following page is one of the cards that are used in this "talent-hunt" at the Edison Company.

Is it too much to ask an organization to interest itself in the discovery and development of whatever native capacities may be dormant in the working force? Surely the results in the most successful modern plants should encourage others to take some interest in this vital matter.

"Blind Alley," or "Dead-End" Jobs.—A good deal of literature has been published within the last dozen years in which scathing criticism is made of what has come to be known as "blind alley" or "dead-end" jobs. By these phrases is meant work of a character which leads to nothing in the way of further interest, opportunity, acquisition of skill, experience, or anything else which makes an appeal to normal human intelligence and ambition. The work in itself is not under attack in these criticisms so much as the lack of incentive and appeal in the scheme of management.

What every alert manager must consider in connection with the various jobs under his charge, is

<div style="display: flex; justify-content: space-between; font-size: small;"> EMPLOYEE AGE STREET ADDRESS </div>											
Date of Application _____											
Experienced as _____											
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> MALE </div> <div style="text-align: center;"> FEMALE </div> </div>											
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <p>1. AS Assembler</p> <p>2. BL Blacksmith</p> <p>3. CM Cabinet Maker</p> <p>4. CR Carpenter</p> <p>5. CH Cheffeur</p> <p>6. EL Electrician</p> <p>7. EN Engineer</p> <p>8. EX Experimental or Special</p> <p>9. FW Film Worker</p> <p>10. FI Fireman</p> </div> <div style="width: 33%;"> <p>11. IN Inspector</p> <p>12. JL Jewel Head</p> <p>13. LA Laborer</p> <p>14. MH Machine Hand</p> <p>15. MA Machinist</p> <p>16. MS Mason</p> <p>17. MR Millwright-Rigger</p> <p>18. PT Painter</p> <p>19. PL Pipe Fitter—Plumber</p> <p>20. PB Polisher—Buffer</p> <p>21. SM Sheet Metal Worker</p> </div> <div style="width: 33%;"> <p>22. DM Tool, Die Maker and Die Setter</p> <p>23. UA Unskilled A</p> <p>24. UB Unskilled B</p> <p>25. UC Unskilled C</p> <p>26. SL Solderer</p> <p>27. JP Japanese</p> </div> <div style="width: 33%;"> <p>28. FA Assembler</p> <p>29. FN Inspector</p> <p>30. FT Taster</p> <p>31. FW Washer</p> <p>32. FU Unskilled A</p> <p>33. FU Unskilled B</p> <p>34. FU Unskilled C</p> </div> </div>											
<div style="display: flex; justify-content: space-between; font-size: small;"> NOTES DATE LIST EMPLOYEE NOTES ON EMPLOYMENT NO. IN CHECK DATE </div>											

RECORD CARD OF EMPLOYEE—THOMAS A. EDISON CO.

After the examination of an employee, this card is filled out as indicated; colored metal tabs for ready reference are inserted on the key numbers giving the man's experience in work other than he is now engaged, and the card is folded along the dotted lines and filed in a 5 x 8-inch card index. On the reverse of card, space is provided for listing "previous employment" and "inquiries received."

just whether they offer instruction to normal human minds, and the possibility of going forward either in the job itself or in some job higher up? In other words, an employer or manager may well ask himself this question: "What are my employees getting out of this place besides wages? Is this place known as a good one to work in, as a place where ambition and good work are appreciated, where there are chances to go on and up?"

Jobs are scrutinized today as they never have been before. They are appraised not only from the viewpoint of safety, health, wages, hours, treatment of men, and the like; they are weighed with respect to the opportunities they offer on a long-time basis. Which employer gets the pick of workers most easily? The one reputed to have the fullest stream of opportunity in his work place.

A liberal system of promotion and transfer has therefore become one of the most familiar features of a modern personnel plan, and some of the most interesting achievements in man-management may be traced to the workings of such a system.

Does the possibility of easy transfer have the effect of unsettling men, making them desire to move about continually? This fear has sometimes been expressed. But what makes men restless is the inability to move, or to get ahead. This fundamental law of human nature is forgotten frequently, and its neglect gives rise to situations that are never understood by the employer who looks upon a working force as something rigid.

The best practice is to chart not only each posi-

tion and job in a plant, but also to point out, if possible, just what each leads to, either in the line of more responsibility, a better job, or more return of some kind within the limits of the job itself.

"Three-Position" Plan of Promotion.—One of the most illuminating contributions to the promotion idea has come from Mr. Frank Gilbreth, in his proposal of what he calls the "Three-Position Plan of Promotion." In this plan each man is considered as occupying three positions in the organization.

The three positions are as follows: first, and lowest, the position that the man has last occupied in the organization; second, the position that the man is occupying at present in the organization; third, and highest, the position that the man will next occupy. In the first position the worker occupies the place of the teacher, this position being at the same time occupied by two other men, that is, by the worker doing the work, who receives little or no instruction in the duties of that position except in an emergency, and by the worker below who is learning the work. In the second position the worker is actually in charge of the work, and is constantly also the teacher of the man next below him, who will next occupy the position. He is also, in emergencies, a learner of the duties of his present position from the man above him. In the third position the worker occupies the place of learner, and is being constantly instructed by the man in the duties of the position immediately above.

Naturally a plan like this demands a close co-ordination of all positions. This is provided for through the master promotion chart. This chart is in the hands of the man in charge of promotion. It is slightly different for each organization. It consists of a schematic arrangement of all positions in the organization, so arranged as to provide for lines of most rapid

advancement, along the various functions and sub-functions under which the measured functional management by which we operate, works. The great advantage of such a chart is that it makes possible visualizing the complete problem of the organization's needs in teaching and preparing its members. The direct product of this, is that the man in charge of promotion sees clearly the needs and the means of filling them, the demand and the supply. The important by-product is the gradual evolution of permanent, rapid, direct paths of promotion. This means the abolishment of the "blind alley" job, that is, a position into which some member of the organization drifts with no chance of advancement. Another by-product of this chart is the fact that the promotion head, promotion manager, or chief of promotion, as he has been variously called, can arrange for shifting or transferring the worker easily, if he sees that he has been improperly placed, or if he develops abilities along some unexpected line. This is often the case under this type of management, where there is a great opportunity for the development of latent, as well as apparent, abilities. This master promotion chart is the great educative force for the management as to the importance of proper education.

Now there are various questions that may arise concerning this subject, that it is well to answer here:

1. What becomes of the workers who find exactly the positions that suit them, and have no desire to advance?

The answer to this, is that if a worker finds such a position, he is retained in it, and that others who go beyond it are trained in the work of that position by him, until they know enough about it to advance to the next higher grade. This often happens, especially in the case of the workers who prefer positions entailing comparatively little responsibility, and who, arriving at some work that satisfies them, and that involves but slight responsibility, choose to make that particular

work a life vocation. If, as is seldom the case, a second worker is found who desires to remain in the same position, it is sometimes advisable to place such a contented specialist in another organization, as trained and satisfied expert workers and teachers are all too rare.

2. If promotion is constant, are not men constantly promoted or graduated out of the organization?

The answer to this is "Yes, and always to waiting, and far better, positions."

3. What becomes of such well-known "blind-alley" jobs as that of elevator or errand boy?

These positions are transformed into training stations or schools. Through them the young worker is put in touch with various lines of activity in the organization, and his possibilities, capabilities, and tastes are noted. Tending jobs under this type of management are also so used as training stations. The new work for crippled soldiers, which is now occupying so much of our attention, is also furnishing a means of filling such "blind-alley" jobs. A position that might be deadening for a young, ambitious boy, or for a progressive worker, might prove the salvation of a maimed or crippled worker, who might otherwise become an idle, unproductive, and, worst of all, a discouraged member of the community.

Listing Positions in a Department Store.—I have mentioned the charting of every job and of the avenues of promotion as a basic requirement in the proper utilization of men and their capacities. Here is an outline of a study of department-store positions, used for the purpose of listing every position open in the modern department store. One use in view, when this investigation was made, was to publish a "picture" of the large variety of opportunities

open in retail-store work. This was a highly beneficial idea, for most applicants for store work have a very limited idea of what to apply for. Such a picture suggests, of course, an idea of great value for factories and other concerns that have to make known their wants in the labor market.

The published study referred to was not limited merely to a catalogue of positions. The first chart, on page 302, shows the four main divisions of store management with their subdivisions. The following four charts, on pages 303, 304, 305, show the positions available and their requirements under the four main divisions. A diagram of the salesman's requirements is separately charted on page 306.

Advice of a Department Store Manager.—The general manager of one of the largest and best-known department stores in the country has given a mass of interesting detail bearing on the promotion problem. I quote here some of the most important advice:

(1) Remember that the larger and stronger the organization, as a rule the slower the progress of a beginner therein, but the greater the reward, in the end, to the one who will stick and continue to grow.

(2) Advancement is inevitable, and need not be sought elsewhere, provided the young man in question continues to study as well as work. He must know his present "job" and perform its duties thoroughly, but in addition he must be climbing higher in his observation, thinking, studying, and reading, so that instead of settling into a rut he is steadily broadening in his knowledge and capacity.

(3) When he finds himself sought out with offers of posi-

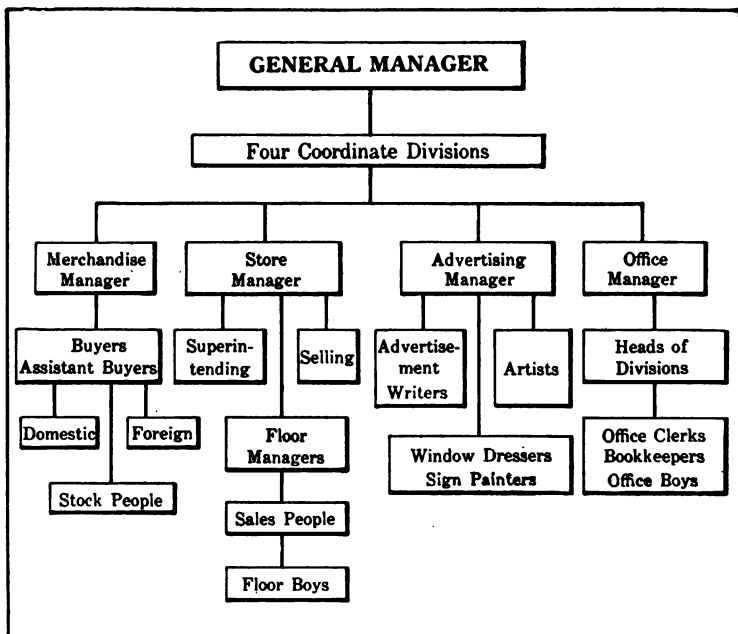


CHART OF DEPARTMENT STORE ORGANIZATION

tions elsewhere, he may fairly well conclude that he is making good progress where he is, and that, in all probability, to hold on until he has reached or is ready for the top, where he now is, will do more for him in the end than to step aside for that which may offer a little larger sum immediately in hand, but is only a way-station.

There are those who need to drift around from place to place, because in so doing they receive the knocks and the pressure which compel progress. There are those who have not got it in them to compel their advance from within themselves. Those who can do the latter usually rise best by perseverance and continuance in the suitable thing or the position first undertaken.

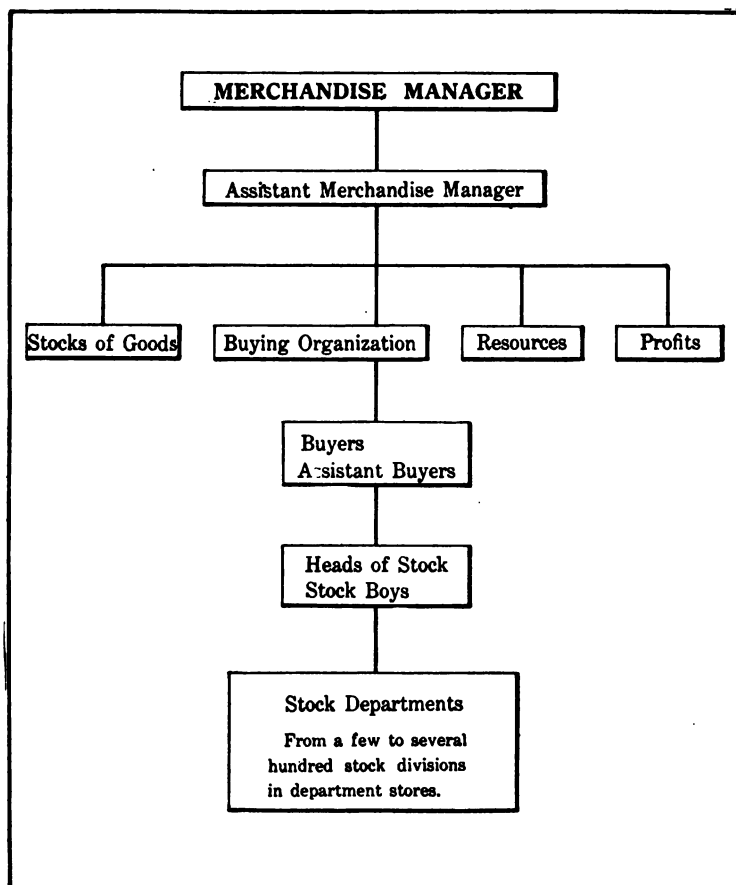


DIAGRAM OF THE MERCHANDISE DEPARTMENT

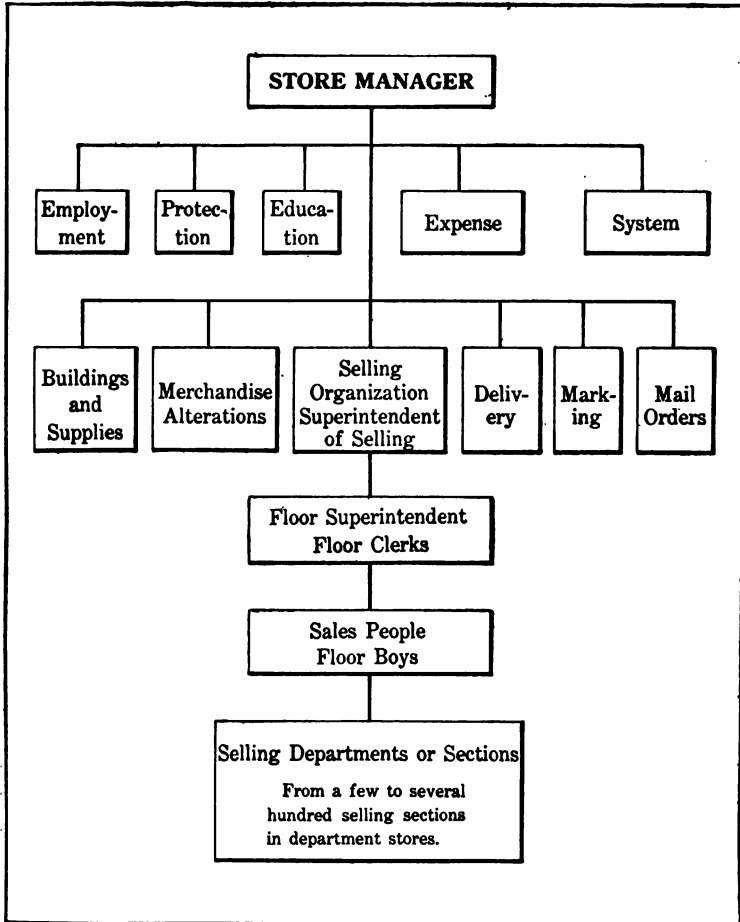


DIAGRAM OF STORE MANAGER'S DEPARTMENT

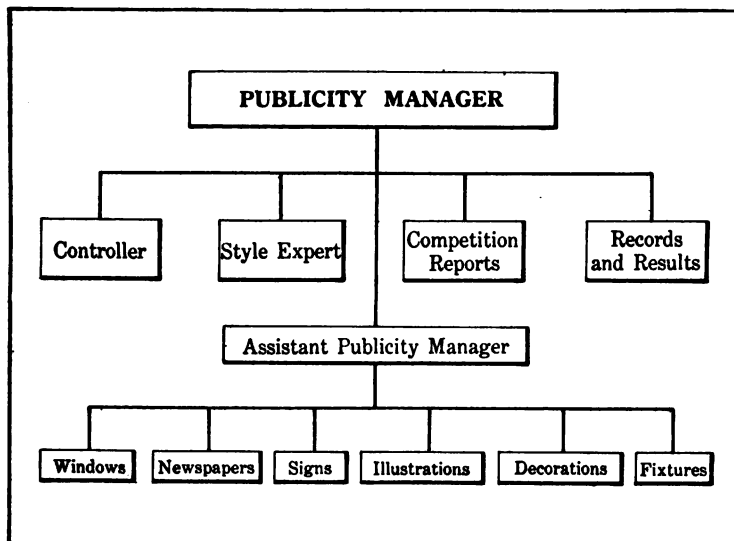


DIAGRAM OF THE ADVERTISING DEPARTMENT

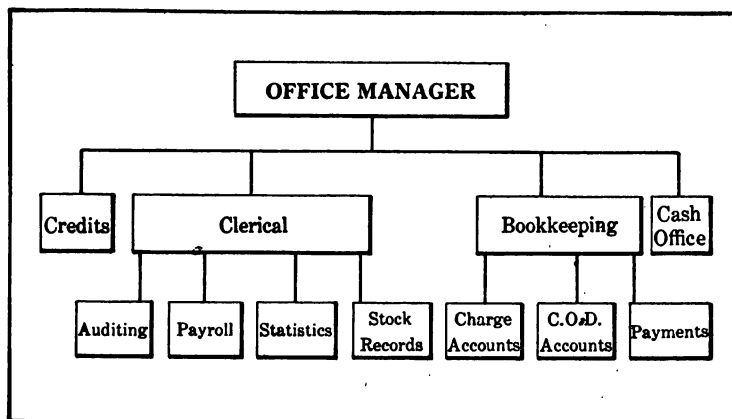


DIAGRAM OF THE OFFICE DEPARTMENT

Efficient Salesmanship				
Good taste in dress and manners	Full compliance with the store system	Thorough knowledge of merchandise	Keen sense of responsibility to the store for results	Genuine desire to satisfy the customer

DIAGRAM OF SALESMANSHIP REQUIREMENTS

In the great majority of cases, service in a department store is of high value as a training for a boy; many who leave the large establishment go into good positions in other stores or in other fields.

Positions which bring a boy into contact with the firm, with the stock, or with the customers, are the ones that lead him ahead.

Actual Examples of Promotion and Transfer.—The most usual lines of promotion and transfer for boys and men may best be shown by means of actual examples. In one of the large stores that were investigated, in one month, there were from one to six promotions of each of the following grades:

Floor boy to retail office.
 Floor boy to shipping room.
 Office boy to stock boy.
 Office boy to time desk.
 Errand boy to inspector.
 Errand boy to truckman.
 Teller to stock boy.
 Inspector to retail office.
 Inspector to mail-order department.
 Inspector to receiving room.

Inspector to examiner.
 Inspector to bushelling room.
 Inspector to adjustment office.
 Truckman to salesman.
 Truckman to inspector.
 Truckman to office.
 Stock boy to salesman.
 Elevator boy to salesman.
 Salesman to floor superintendent.
 Cashier to retail office.
 Assistant buyer to buyer.
 Salesman to overseer of juvenile help.
 Assistant buyer to manager of an outside firm.
 Stock office of the store to the Department of School Supplies of the city.

These promotions were made during the comparatively quiet season of the year. About twenty new boys were taken into the business to fill the vacancies caused by such promotions throughout the store.

The following are some examples of actual advancement, in a large store, of boys who began and continued their business career in the one store exclusively. At the earlier periods indicated by these dates, the term "cash boy" was in more general use than at the present time.

Employed 29 years previous as Cash Boy.

Office Boy in Superintendent's Office.....	3 years
Clerk in same.....	4 years
Chief Clerk in same.....	3 years
Assistant in Oriental Goods.....	6 years
Buyer of Oriental Goods.....	6 years
Makes Annual Foreign Trip.	

Employed 18 years Previous as Cash Boy.

Cash Boy.....	1 year
Errand Boy in Bureau of Adjustments...	1 year
Clerk in same.....	1 year
Tracer in same.....	1 year
Office Boy in Furniture.....	9 months
Clerk in same.....	2 years
Stock Clerk in same.....	2 years
Assistant and Buyer.....	3½ years

Advantages of a Transfer System.—Transfer of employees to jobs or departments in which they can do better or be more contented, is also a growing feature of good management. This practice has saved thousands of good men to various establishments which have made provision for such change. So far as reports go, there is no case showing that a transfer system that is intelligently conducted works anything but benefit for all concerned.

One main object of a transfer system is to save good men for the organization. Another object, equally potent, is to limit the power to discharge, so frequently lodged in the hands of ill-tempered or short-sighted subordinates.

In actual practice, the system works as follows: A foreman finds a man unsuitable—for some reason, good or bad. Instead of sending him away from the plant, he returns him to the employment department, with a card or a note, addressed confidentially, giving the reason for the dismissal. If the employment head thinks the man can still be used or should be retained in the organization, he tries to find a place better suited for him. Experience has amply shown that

some men who could not get along in one department or with a certain type of boss, do remarkably well after one or two transfers. Indeed, some of the most successful executives and craftsmen in a number of big industries today, can point to a personal experience with a transfer system.

That such a system makes for good will, labor stability, and general efficiency, none can deny. Men must be given a chance to make good; and it is to the interest of the work, as well as to that of the worker, that such opportunity be included in the scheme of management.

Records of transfer, kept for a certain period—one year, in two corporations in New England—show a large reduction in labor turnover as a result of the system. Moreover, these records also show that a majority of transferred men do work of the highest grade, and the data indicate how well the department heads are able to get along with their men.

Obligation to Train Men.—Measures with respect to promotion and transfer of men are excellent provisions, from every standpoint. But they do not solve the whole problem of the adjustment of workers to their work. Every organization is under an obligation to train its men; but behind any such movement there is also the incentive of self-interest, since the firm itself benefits largely. A training scheme is no new idea to any up-to-date plant. The country is full of excellent vocational schools, some publicly supported, some carried on with private funds, and many of them conducted within the plants

of the corporations. I do not propose to deal, in this chapter, with the question of industrial education or apprenticeship training. There is abundant literature on this important subject available to all.

Vocational Training.—One plan of vocational training, however, is worthy of special mention as being of interest to every manager. It is a new plan, in successful operations, and deserves to be examined. A leading figure in the formulation of this new training scheme is Dr. Charles A. Prosser, of the Dunwoody Institute, Minneapolis, and his own statement is worth giving.

“Broadly speaking, the situation is this throughout the country: Almost every foreman or head of department hires his own men; he hires them on the spur of the moment; he hires them in times of stress; he hires them without having established any standards; he hires them by chance; he hires them usually without investigation, on the recommendation of some more or less irresponsible person. I do not believe we shall get very far in any large industrial establishment until the plant is so organized that, in the last analysis, at least, one man is responsible for the preliminary selection, in any event, of the people who are to be employed in that establishment.

“As a result of the survey we have established, in Minneapolis, trade understandings with about twenty-four different trades and industries. The employers in each of these have arranged to apply to the Dunwoody Institute, the Girls’ Vocational High School, or the technical department of the Central High School, as the first source of supply in taking on new

workers. We have opened up, as it were, a funnel leading into the industry.

"One of the finest things about that arrangement is that the trade-unions of the city have approved of it most heartily for all the organized shops over which they have jurisdiction. So that plan is in operation in both organized and unorganized shops, with both organized and unorganized employers, and has to do with unorganized as well as organized trades.

"In these two schools there is a period of three months, at the very outset, during which these young people who elect one trade or one industry are tried out in that trade or industry in the shop, and if they find that they are not fitted for the trade, or do not like it, they are shifted to another.

"All the experience in this country goes to show, however, that in about ninety-seven out of every hundred cases the trade or industry which the pupil elects at the very outset is the one which he seems best fitted to follow.

"So that, so far as the daytime student is concerned, we are determining in advance whether or not this youth should go into this or that trade. We are sure to reduce the labor turnover, so far as the day classes of the industrial school are concerned. By a process of two years' selection and training, a process which requires sacrifice on the part of the student, the day school will be able to present its graduates to the trades and say, 'Here are young people who want to follow your line, and who have made the sacrifice in order to get the training.'

“Now, the question of preparing the worker for the job. The Northwestern Knitting Mills, of Minneapolis, have established, partly, I think, as the result of the work of the survey, a school for cutters. The new girls who are to be cutters in the establishments, are trained in a three-months’ course in the plant before they go on to the regular floor to do productive work. The all-day school, preparing young people before they go into the shop, and, by establishing understandings with the industries, being able to assure these young people a start in the trade when they go out as wage-earners, is another kind of training scheme for new workers.

“When we opened up the machine shops of three schools in Minneapolis, a large number of machinists wanted to learn how to run just the machine that would enable them to turn out shrapnel. While the product made may not be a very pleasant thing to think about, nevertheless such was the demand of the establishment in which they worked. In order to make more money, or hold their positions, they wanted additional training with the lathe. They knew how to run one machine, but came back to school to learn how to run another. They were inducting themselves, through the good offices of the school, into a new job and a better job.

“The man who goes to evening school goes with the hope that he will be able to increase his wage-earning capacity. One problem of the employment manager, or any other employer, is the question of how he may encourage the attempt on the part of that employee of his to get more training. The

tragic thing about it is, that all over the country so many employers are deaf and dumb to that situation—as a group. The man comes to evening school; he acquires a knowledge of drawing; he learns some mathematics; he develops the ability to handle a new machine; he learns cost-estimating; he takes greater proficiency back to the shop—and the employer doesn't even know he has been studying. When the times comes for a promotion in the plant, which this man ought to have, other things being equal, he is too often passed over for some one else, either because he is too modest, or because the plant lacks standard and system in measuring efficiency, or because the foreman has some favorite whom he wishes to put in the position.

“The man who goes to evening school is a marked man; he is the extraordinary man in his trade; he is the man with energy and ambition. The very fact that he goes to evening school marks him out from among his fellows—without saying anything as to his training.

“The men who attend the evening schools are usually the best men in the plants; but they will not get the encouragement and recognition they deserve until the plants in this country standardize their work, and until the employer learns to evaluate his own employees and take more interest in them and in what they are doing.”

CHAPTER XIII

TEAM PLAY

Co-operation Brings Best Results.—The employer or executive who is aware of the new spirit of the times, the changes brought about through legislation, and the efforts of various forward-looking groups—social, civic, educational, and industrial—oftentimes asks himself the question, “How may I bring my organization to the point where it will reflect most clearly these modern tendencies?” Assuredly, the time when an employer could secure a day’s work through fear, coercion, repression, and brute authority has passed, as have feudalism and peonage. Men conscious of their manhood and of their civic rights, confront the employing executive. The rule now is that of give and take, mutuality, and a growing sense of common interest. To be sure, there are still examples of antiquated management, and false relationships between managers and men. But, in the notably modern and successful organizations of the present day, one finds ample support for the belief that the spirit of co-operation and mutual negotiation between employer and employed brings about the best results.

One of the most successful employers in the country, in discussing the new idea of team play,

“My feeling about the fundamental policy of employment is that we often stop short in our thinking. We buy a machine, you and I. We are, as I have suggested, very careful about that machine. In the first place, we do not buy the machine unless we understand it. There is not one of us here who would think of putting an apparatus into our office or shop that we did not understand. That means that we have given attention to the laws of that machine. We know what it can do. We should consider ourselves very, very absurd if we put into our factory any apparatus about which we could say that we had not studied its laws, and did not know how it operated, what its capacity of output might be, and to what extent it would bear overstrain. You would not run a paper machine in a dusty place. A man would be considered foolish, to say the least, to do that; and there are other delicate machines which you are especially careful to keep dry, and in other respects to keep guarded and cared for.

“How many of us apply the same kind of thinking to the man or the woman we take into our shops—so infinitely more complex a machine than the loom, or the shaper, or the planer, or the paper machine, an infinitely more complex thing with all sorts of qualities to which most of us pay no attention? In fact, there is a word we use in that connection which, by its very use, shows the limitation of our thought. We say we employ so many ‘hands.’ The very use of the word shows that we do not appreciate the situation. We are not employing ‘hands’; we are employing brains, and hearts, and dispositions, and

all sorts of elements that make for personality—we are employing them all.

“Now if these is one neglected thing in the employment problem, it is the human capacity for responsiveness. We are all of us perfectly familiar with the human capacity for destructiveness. We feel that ourselves. We do not like it when we are made to do something which was not in the bond. We do not like it, you and I in the office, sitting at our comfortable desks, when something is put up to us that was not in the bond of employment. We resent it when we are told to do it under conditions of hardship, with no account being taken of fatigue, or of our physical capacity for the particular thing we are asked to do, with no thought of the infinite complexity of the human element employed.

“It is the darkest kind of blundering and blindness that too many of us use. Here is a man with all sorts of initiative along certain lines; he can handle a lathe, perhaps, to perfection; but because he was employed as a grinder, for which he has no aptitude at all, we keep him as a grinder. The idea of selection in many of our shops and offices is almost unknown; but a man who is no good at one thing is assumed, therefore, to be good at nothing, and out he goes, without thought, into the world. About the saddest thing in industry is the fearful procession of the incompetent, who enter and go out of our great mills.

“But almost as sad a sight is the alleged brain of the superintendent who lets that sort of thing go on indefinitely.”

The Democratic Spirit in Industry.—The value of men as an organization, quite apart from their economic function, is the basis of what may be called the new American, or democratic, spirit in industry.

Professor Drury, of Ohio State University, has given effective expression of this new industrial force:

“To most persons it will come as a surprise that this democratic tendency of the day should be seriously advanced as an aid to industrial efficiency. Almost all Americans approve, in a general way, of freedom—for they like it. Especially when it comes to a man’s own actions, he feels that life is more worth the living if he may do as he wishes. But, at the same time, absence of authority is hardly counted a tangible business asset. On the contrary, the efficiency movement, in both the governmental and the industrial spheres, has perhaps for its central goal the furtherance of discipline, centralization, and expert control. Let the ablest men be placed in positions of authority; let these men collect and invent the best possible methods for every operation; and then let special care be taken to see that every one follows faithfully the one most efficient method. It may be that this is the very definition of ‘efficiency’ for most of us.

“Matter of course though this idea seems to have become, it is nevertheless here proposed to challenge it. The first test to which our faith in centralization will be put, will be an analysis of some of the world’s experience in the matter. Most of this part of the paper will be devoted to Germany, it being particu-

larly to the point to dispel the feeling that German experience has vitiated once for all any attempt to find an efficiency in democracy.

“The simplest method of estimating the character and value of German efficiency, is to compare Germany with France or England. France and England are regarded as the homes of democracy—France, especially in her philosophy; England in daily life. Germany, on the other hand, believes firmly in bureaucracy and paternalism. What does a comparison of the achievements of the two cultures show? It shows, so the advocates of democracy allege, that all the great modern achievements—the parliamentary system, the eighteenth-century mechanical inventions, modern philosophy and literature in its earlier development, the Industrial Revolution, the development of commerce, of navigation, of colonies, modern science—that all these originated mostly in England, though to some extent in France.

“Here the Germans protest. They do not care for ancient history. They are sure that in recent times their country has forged ahead much more rapidly than any other. What if this should be so—the democrats urge—does it follow that a centralized state, even if efficient in importing civilization, is the kind that can develop it in the first place? Japan and Germany may borrow, but only a democratic people can originate.”

Employers Must be Co-Workers.—Here is a real problem for every industrial manager, “How can the highest efficiency be obtained without any sacrifice of that freedom which, in the long run, secures ‘the

greatest happiness for the greatest number'?" The executive who experiments in the spirit of this question, who aims to combine productivity with team play, is on the way to a larger success than has yet attended any other form of management. But to make any headway in this direction requires an absolutely sincere respect for men as men, and an earnest wish to develop them into actual co-workers. Obviously, a change in viewpoint is here called for. To bring a working force up to a point where it is trained to contribute ideas and a feeling of responsibility for all that goes on within a plant, is an achievement not yet possible in the average organization. Nevertheless, the goal is so important, so full of reward in the event of success, that the least any manager can do is to try to understand just what this idea signifies, irrespective of whether there can be an early realization of its details.

Mr. Gompers, in his recent editorial on "Labor's Participation in Government," in the American Federationist, writes as follows:

"These, and all workers, have earned the right to real representation in government and in determining its policies of industry and society—have earned their right through their flesh and blood, and through the bone-wearing anguish of toil. Yet they have been denied full, real recognition of their worth as men and citizens; they have not been admitted to participation in the heart of government. Daily life has taught them to distinguish between the real and the spurious—between true power and things associated with power.

“The right to vote implies but little as to real participation of the voter in the government. With the development in our country, and the increases in our population, the political tendency has been toward the creation of commissions authorized to investigate, to determine policies, and to formulate plans. Since the real work is done through commissions and committees, these are the political agencies that exercise governmental power. Only when there is representation on these committees and commissions, in addition to other recognized political rights, is there real participation in the political life of the nation. This commission tendency of government has been so gradual that its significance and importance have not been grasped by all of the citizens. Those who have interpreted this tendency aright have been urging upon the attention, not only of those in authority, but of the wage-earners themselves, the justice and the necessity for representation of wage-earners on these commissions and committees.

“Certainly the conduct of no industry must be allowed to deny rights which the government purports to guarantee, or to controvert principles for which the government stands. Coincidentally, any industry which does not see, must be made to see, that in the evolution of a system of which it is the beneficiary, by which people have been drawn from their homes to centralization within factories or plants, and by which workers have sacrificed the mental and physical advantages of a variety of occupations to highly specialized tasks, it has become responsible for the establishment of conditions under which the well-

being of the worker shall be served throughout his hours of employment, and for the setting of hours and wages at points where he shall have a chance, outside of working hours, to conserve the welfare of himself and those dependent on him."

What is Good Will?—The basis of industrial efficiency is good will. By good will I do not mean mushiness or sentimentality. Good will is the spirit of co-operation, the identification of self-interest with the interests of another. Bonuses to save waste, time, or effort can never compete in effectiveness with the willing spirit of men who do what they do because they like to. Am I painting too rosy a picture of average human nature? Consider how salesmanship has changed from shrewd trading based on the principle, "Caveat Emptor" ("Let the Buyer Beware"), to the unselfish service of today that has "Service" for its inspiring slogan. "The public be satisfied" is now the policy of the best conducted hotels, department stores, railroads, and factories. Are buyer and seller sworn enemies? A business conducted on any such theory is headed for the rocks. Though the buyer may wish to purchase for as little money as possible, and the seller to secure as much profit as possible, every salesman in every rightly managed business is taught to do his best first of all, to win the satisfaction of the customer, whatever the cost may be.

Can employer and employed go on doing their work on a theory that corresponds to the now discarded "Caveat Emptor"? Can they afford to adopt as their slogan, "Let each side beware"?

Handling the Working Forces.—Industrial efficiency is, as every economist and thinking layman knows, the secret of general social well-being. Efficiency engineering has been a great boon to the age, and its benefits will continue to increase as the years go on. But, as employers and managers have learned to their grief, the rank and file of the workers are hostile to anything that calls itself scientific management. The reason for this bitter hostility is not far to seek. Men who were geniuses in the technical field of production assumed that if their methods could only be properly tried out, the workers would fall into line. They gave little thought, because they were preoccupied with the big problems of their own profession, to the equally great problems involved in labor management. They did not see that in this field there was need of another specialist; that the problems connected with the handling of the working forces could not be dealt with merely as an incident to production and organization, but required another kind of technical skill, insight, and procedure.

We have seen that both good business and self-respect require that there shall be clear, unsentimental thinking on the part of managers and men in considering questions of industrial relations, for team play is another name for industrial relations. Workers do not want charity. They desire understanding, fair play, and a chance to grow as workers and citizens in the work in which they are engaged.

The Spirit of Fellowship.—In the history of welfare work we see the development of the modern viewpoint as regards industrial relations. In the

early experiments along welfare lines, the employers aimed to express their kindly feelings and their sense of responsibility for the workers. In small workshops, close acquaintanceship made it possible to maintain familiar relations without risk of misunderstanding or of questioning of motives. When men were away, the employer or a member of his family were as likely as not to know the reason, just as any neighbor might. But now that huge corporations are numerous, the neighborly spirit can no longer prevail. And yet, if the spirit of fellowship can still accomplish good, that is reason enough for giving expression to it. Employers who pioneer in this spirit are doing their duty and are helping to point the way to better industrial relations. The caution with respect to all welfare work—which must be heeded—is that it must not be allowed to take the place of the utmost possible freedom of co-operation between management and men.

Science and Sentiment.—The spirit of team play does not, of course, best manifest itself in mere kindly intentions. Its most satisfactory expressions are always marked by a blend of science and sentiment. The history of the shorter work day is a good illustration of concrete benefits that always flow from a fair use of human energy. A century ago, employers dreaded any step that would reduce the long twelve- or fourteen-hour work day, because they believed that workers would abuse their leisure time. Idleness was regarded as the supreme crime. But intelligent managers now know that too long a day seriously harms the employee, and that overwork always produces

violent reactions. Weary men go to extremes in their diversions; this is a simple fact in psychology.

Experience with well-regulated work days has shown that good will, satisfactory work—and even an increased output—always go side by side with just dealing and regard for the condition of the men.

Production and Shorter Hours.—One of the great shoe manufacturers of New England, believing in team play, has undertaken to study the effect on production of shortening hours. He employs four thousand operatives in seven factories. Mr. John Fitch, the well-known industrial investigator, has recorded the results of this move, in a statement furnished by the “Labor Supervisor” of the shoe corporation:*

“During the first week of December, 1916, our company voluntarily reduced the hours of labor in its entire system of factories, from 55 hours per week to 52 hours per week.

“This change was put into effect at a time when the conditions in our factories were such as to furnish excellent data as to the effect of such a reduction in hours on the production of a large number of employees.

“In the period before the change was made—

1. We had built up production to what was regarded as approximately maximum, each plant having reached a production in excess of any previous period.

2. Each plant was laid out with the maximum number of machines in the space available.

3. There was an employee on practically every machine in the system.

* The Survey, May, 1917.

4. Over 95 per cent of the productive payroll was on standardized piece-work.

5. All of the plants were running smoothly under a routing system in which delays due to lack of material were practically zero.

6. No new factories were in process of organization.

7. No material changes were being made in the character of the product.

8. No new machinery or processes tending to increase per capita output materially, were being installed; what few changes were being made would tend to increase slightly the productive difficulty of the product.

9. Standard production load was such that "going out early" was almost unknown; here and there a few special departments were working overtime occasionally.

"Our system of factories may be divided into two general classes:

1. Supply factories, where material is cut or prepared and fed to the shoe factories.
2. Seven shoe factories, where the product is assembled.

"As the seven shoe factories are operated under a standard system, the conditions are comparable with those of sister ships in the Navy. Production is routed into and through these factories in what we call 'sheets,' each sheet constituting a half day's, and 11 sheets a week's, production. When the hours of labor were decreased, in December, 1916, it was decided to make no reduction in the standard sheet, or half-day quota. The plan was to determine, after trial, what reduction, if any, would prove necessary as a result of the shorter hours.

"We have operated under the reduced hours for

four months. It has been found unnecessary to reduce the standard production; actual production has not decreased. The following table shows the changes made in standard production since the first week in December:

Date	Factory Symbol	Production Changed		Reason
		From—	To—	
March, 1917.....	MC....	212	200	To offset increase in a difficult portion of production.
April, 1917.....	MC....	200	212	Former production resumed.
March, 1917.....	ME....	288	275	To facilitate improvement of product.
" ".....	ML....	250	262	Factory gaining in actual production.
February, 1917....	MD....	288	275	To offset and increase in more difficult part of product.
December, 1916....	MN....	238	250	Increased production.
" ".....	MP....	175	175	No change.
" ".....	MT....	108	108	"

“Under the production system in use, any department falling behind standard production to such extent as to be one-half-day behind schedule would automatically cause what is called a ‘dropping of sheets’ and a reduction in the standard production for the particular factory involved. This event has not occurred; in fact, the writer, who has been in general charge of the production system in this company for over ten years, believes that at no period in its history have we had so little trouble with the production system as during the winter of 1916-17; this, too, in spite of the fact that we have had more difficulties arising from outside our plants than heretofore, namely:

1. Shortage of material.
2. Railroad traffic disturbances, resulting in unexpected delays in materials.

“Our organization would regard the above data as ample to justify the general conclusion that we have lost no production as a result of shortening hours. To reduce it to an absolute certainty, however, we have taken from our actual records, data for the two months preceding and the months following the reduction in hours, namely:

1. Actual number of employees on the pay rolls.
2. Actual production shipped.
3. Comparison in the unit representing the productivity per employee per working day.

“These figures covered the combined production of the seven shoe factories (sister assembling plants) and result as follows:

Period	Total number of employees	Productive unit per employee per day based on pairs shipped
October and November, 1916 (working 55 hours).....	3,986	8.91
December, 1916, and January, 1917 (working 52 hours).....	4,105	9.00
February and March, 1917 (working 52 hours).....	4,170	9.02

“The writer is firmly convinced from this, and similar experiments, that long working hours are not only an economic loss to the community as a whole, but that there is ample evidence to indicate that even inside factory walls there is no net profit in running on a schedule much over eight and one-half hours per day. There are so many complex factors entering into the production of the individual employee, and particularly into the production of employee groups,

that the old theory of proportional production per hour is absolutely untenable.

“Our experience has been that overtime work is decidedly undesirable as a method of increasing production. Our policy is to discourage it in all departments. To this end we have made it a rule, for several years, to pay 50 per cent extra for all piece-work done during overtime hours. We permit overtime work, ordinarily, under the following conditions only:

1. To quickly offset breaks in continuous production.
2. When only a small number of employees are affected.
3. For short periods.

“To sum up, our whole experience tends to justify the shorter-hour movement. We are absolutely convinced that it is right for the community, as a whole, because we feel sure it would increase the net productivity of society. We believe it is right for the individual factory unit, because we have come to realize that even in an individual plant the real problem is to get the maximum amount of work done by a given thousand people, not in a day, in a week, or in a year, but in a lifetime.”

Examples of Team Play.—The concrete expression of team play in its different phases, as evidenced in various successful corporations, may be summed up under the following heads:

Work Improvement:

1. Permanence of the job
2. Minimum wage
3. Profit-sharing

4. Periodic wage increases
5. Periodic promotion
6. Efficiency training
7. Suggestion systems
8. Shop committees
9. Arbitration committies
10. Collective bargaining
11. Wage committees
12. Pensions
13. Sick, old-age, accident, and life benefits.

Social Improvement:

1. Shorter hours
2. Rest periods
3. Mitigating strain and monotony
4. Holidays
5. Model plant
6. Model equipment
7. Safety campaigns
8. Washing facilities
9. Lunch rooms and food protection
10. Recreation
11. Health work
12. Adequate housing.

This classification is by no means exhaustive, but it indicates such efforts as may be witnessed in a survey of various plants. All these lines may properly be placed under the head of team play. While activities in the directions indicated may not remove every possible point of controversy, and abate completely the worker's strivings towards a greater share of industrial responsibility, they are so well worth while in themselves that no organization can afford to lag

behind in their promotion of these phases of industrial co-operation.

Sears, Roebuck & Company's Work.—Sears, Roebuck & Company, of Chicago, stands in the forefront as regards work inspired by the idea of team play. For this reason the reader will find it of advantage to pay particular attention to the following outline of that organization's activities:

Sears, Roebuck & Company is located four miles from the noise and confusion of the shopping district. The interior of the buildings is such that the office and stock rooms are large, light, and airy. Artesian wells in "bubble fountains" are found in each department. There is an extensive fire protection, including fire drills among the employees. The women's wash rooms, presided over by competent matrons, are well equipped and kept in excellent condition. From three to four thousand people take advantage of the large dining rooms and cafeteria operated by the firm. The charges to the employees just cover the price of food and service. A paid vacation of one week is given to all employees who have been with the house one year, and two weeks to those who have been with the house three years.

Mutual Benefit Association.—This Association was established by the employees, with department managers as officers and directors, who are voted on by the employees. All members of this Association must have been in the service of Sears, Roebuck & Company three months, and at the time of joining be less than fifty years of age, in good physical condition, and of good moral character. The membership is

voluntary, with dues graded according to the salary, ranging from 30 cents a month for a weekly salary of \$7, to 60 cents for a salary of \$16 or over. About 35 per cent of the employees are members. A sick benefit of three-fourths of the weekly wage is paid for a period of ten weeks after the first three days of illness. The death benefit ranges from \$75 to \$150, according to the salary.

Savings Bank.—For the benefit of the employees, the firm started a savings bank, and pays 5 per cent interest, compounded quarterly, on all savings. About 25 per cent of the employees have accounts.

Anniversary Checks.—Sears, Roebuck & Company gives each year to all employees earning less than \$1500, who have been with the firm five years or more, a certain percentage of their salary as an anniversary gift, and in recognition of good service. For five years' service they receive 5 per cent of their annual salary; 6 per cent for six years' service; and 10 per cent for ten years' service or more.

Medical Department.—This department is in charge of eight physicians, two dentists, and twelve nurses. The employees are free to consult with them at any time. New employees are compelled to undergo an examination. The nurses care for the sick in the Doctor's Office, and visit the sick employees in their homes.

The health of all of the employees has been conserved in every possible way by extremely rigid hygienic rules and by cleanliness throughout the entire house. The Medical Department has made an exhaustive study of tuberculosis, and through con-

stant watching and treatment the plant has been quite thoroughly rid of it. All employees contracting the disease, who have been with the firm any length of time, are helped by Sears, Roebuck & Company. At Naperville, Illinois, the firm maintains a shack, and also has interest in the Valmora Industrial Sanatorium at Valmora, New Mexico, to which tubercular patients are sent.

Library.—The Library consists of a deposit of books from the Chicago Public Library and a collection of our own books, together numbering 3000, with the privilege of drawing upon the supply of the main library. With 14,000 employees, the monthly circulation is more than 6000 volumes. A Librarian is in charge, who selects the books purchased, does the general reference work, and edits the "Library Bulletin," issued every two months.

Young Men's Christian Association.—Within a block of Sears, Roebuck & Company is a new branch of the Young Men's Christian Association. The building has a dormitory of 350 rooms, and has accommodations for 500 men; it is modern in every way, with best equipment. There is an opportunity not only for athletics of all kinds, but for educational work in the night-school classes. Sears, Roebuck & Company contributed a large sum toward the building, and gives the Association a hearty support.

About 10 per cent of its members are Sears, Roebuck & Company's employees.

Personal Work with Girls.—An Advisor, whom the women may consult freely, gives her entire time to

difficulties and problems which are of mutual interest to the firm and the women employees. She has an individual talk with them shortly after they are employed, in which she attempts to give them an idea of what it means to be a business woman in the truest sense of the word.

Athletics.—There are ball grounds and tennis courts for the use of the employees, and club houses with lockers, for both men and women. There are nineteen organized baseball teams, which play regular schedules. There are several tennis tournaments each summer, for both men and women. The season ends in a large field meet, in which the girls have recently participated by presenting folk dances. A physical director and coach is in charge of the athletic activities.

Musical Organizations.—An Employees' Musical Association has recently been organized for the purpose of developing various musical talent. Membership in the Association is open to all employees of Sears, Roebuck & Company who are interested and who possess the necessary talent. Active organization work is now being carried on, with a view to the development of a band, an orchestra, a glee club for the men, and a chorus for the women. Membership in the Association is free, and instruction will be furnished without cost to members by Sears, Roebuck & Company.

Sears-Roebuck Profit-Sharing Plan.—The profit-sharing plan of this mail-order house is one of the most notable in the century. On the following page is a copy of the first notice sent to the employees.

To the Employees of Sears, Roebuck and Co.:

The Officers of the Company, with the approval of the Board of Directors, have decided upon a plan of awarding special recognition to certain employees who have been in the service of the Company five or more years. It is intended to give each employee receiving a salary not exceeding fifteen hundred dollars (\$1500) per annum, and who has been with the house continuously five years or more, an anniversary gift equal to from five to ten per cent of the last year's salary.

In order that all those employees who would qualify hereunder may enjoy anniversary dates during the year 1912, it has been decided to date back the distribution of these anniversary gifts so as to begin as of January 1, 1912.

The plan adopted is as follows:

1. Only employees who have been in the service of the Company for five consecutive years or more, and who receive a salary not exceeding fifteen hundred dollars (\$1500) per annum, will participate in these anniversary gifts.
2. Every such employee who will, during the year 1912, complete five consecutive years of service, will, on the anniversary date of employment, receive a check amounting to five per cent (5%) of his or her past year's salary.
3. Every such employee who will, during the year 1912, complete six consecutive years of service, will, on the anniversary date of employment, receive a check amounting to six per cent (6%) of his or her past year's salary.
4. Every such employee who will, during the year 1912, complete seven consecutive years of service, will, on the anniversary date of employment, receive a check amounting to seven per cent (7%) of his or her past year's salary.

5. Every such employee who will, during the year 1912, complete eight consecutive years of service, will, on the anniversary date of employment, receive a check amounting to eight per cent (8%) of his or her past year's salary.
6. Every such employee who will, during the year 1912, complete nine consecutive years of service, will, on the anniversary date of employment, receive a check amounting to nine per cent (9%) of his or her past year's salary.
7. Every such employee, who will, during the year 1912, complete ten or more consecutive years of service, will, on the anniversary date of employment, receive a check amounting to ten per cent (10%) of his or her best past year's salary.
8. This plan is subject to change at the discretion of the Board of Directors, although it is the intention to continue these anniversary gifts on a similar basis yearly hereafter.

Management, Old and New.—The General Manager of the U. S. Envelope Company, of Worcester, who speaks from an unusually rich experience with both the old and the new type of management, says:

“The nineteenth century will be known to all the centuries of the future as the discoverer of that great elemental dynamic force, the power of steam. During that century the harnessed energy of steam took the place of laborious human toil, and gave the workman shorter hours. With the shorter working day the workman was given some of the daylight, which once was not his, for laborious toil demanded all his waking hours from sun-up to sun-down.

"How do I know this to be a fact? Because before I was ten years of age, in 1862, I worked in a woolen mill in a village three miles from my present home in Worcester, Massachusetts, and the working hours were from five o'clock in the morning till seven o'clock at night. Those were the hours men, women, and little children worked in those "good old days of the past," but the best things about those good old days is that they have gone, and gone forever.

"Given the daylight, the workman had a chance to see the world of nature, and with shorter working hours he was given time for thought, and opinions were envolved. These opinions have created democracy, which is leavening the world, and the Republican ideas and ideals of democracy have practically made obsolete the old words, Master and Servant; and one of the lessons which some need to learn is that we are not today Master and Servants but co-workers in an industrial family.

"Most of the problems which perplex us are human problems. Human nature is of more than '57 varieties,' and almost all of these varieties are usually represented in a shop or store of any considerable size. To handle the hard and trying situations and decide not only what is expedient but what is right, calls for judgment, patience, and tact, plus, and these are things which cannot be learned from books. They are burnt into men in the crucible of experience.

"It is to be expected that managers, superintendents, and formen are to be respected by the men and women whose service they direct, and men in positions of responsibility should remember that these

men and women will often 'size them up,' while they may be quite unconscious of the judgment which is being passed upon them. In the larger industrial units, under present conditions, the help can never know the management, but they do know the superintendent and foremen, and these men represent to them the management, and by these men the management is judged.

"There is a large loss in industry which is due to lack of judgment and tact, and to bad temper, on the part of superintendents and foremen. If the foreman is impatient or angry when asked questions by his help, they will not ask questions. They will keep away from him, and do the best they can without his assistance, but that is not giving his help valuable instruction.

"If an operative is a little dull of comprehension, and does not readily understand (and there are a lot of these people with whom we have to deal), and the foreman loses both his patience and his temper, he has not given the person who wanted assistance the help he ought to have received. The result is, he has made his own job harder by not putting that operative in a position to render him his largest service. The man with an obliging disposition, and a spirit of helpfulness toward his help, makes his own job easier and the burden of management lighter.

"The foreman should understand that it is just as much a part of his business to get along on a just and friendly basis with his help, as it is to see that the standards for quality and quantity of work are maintained. Good relations with his help, a spirit

of friendliness and helpfulness, is a mighty factor in efficiency.

“The workman is, first of all, human; and when one buys only the labor of his hands without the sympathetic co-operation of head and heart, what he receives will never produce efficiency. In order to get the best service from their help (and I like that old-fashioned word, ‘help,’ better than ‘employees’ or ‘operatives’), men in positions of responsibility must do their part to make their help like them rather than fear them, so that they will willingly work with and for them. Such co-operation makes for team work, but there is no team work worthy of the name that is inspired by fear of the boss. The impelling power of a courteous, likable personality is an asset to cultivate in management, an asset which many men thoughtlessly throw away.

“After a somewhat varied experience in management, I say without hesitation, were I compelled to choose between great executive ability, mechanical skill, and a likable, tactful human personality, I would take the latter every time, for such a one can get from the human element an efficiency that will offset the efficiency of men who are lacking in the human qualities. When a manager is so fortunate as to find all these qualities in one man, he ought to thank God every day for his blessings. No mine in the Klondike can compare with his human mine of pure gold, and if he does not appreciate it he ought to.

“Men in positions of responsibility should cultivate the disposition at all times, and especially under try-

ing conditions, to be patient and, above all, fair, because they have a wider horizon and consequently have a broader outlook on life. They should try to see the vexing problem from the other person's angle of vision, always remembering that it may be a restricted vision; they should try to keep their temper, and thus avoid saying things that ought never to be said, but if said, never said in anger. They should be taught never, by a hasty statement or act, to put themselves in positions where they must back down or take the next step which they do not want or intend to take; to be careful about delivering the ultimatum which will force the step that will precipitate trouble—to speak and act thoughtfully and quietly, and to always be the gentleman, which Webster defines as 'One of gentle or refined manners, a well-bred man.' Courtesy always pays.

"They should be taught to hear patiently what their subordinates have to say, to impress upon them the fact that they mean to be fair and just. If one's attitude has been overbearing and domineering, the help will not have toward such men, or the corporation which they represent, the feelings that make for harmony and industrial peace; and sooner or later a crop will be harvested from the seed that has been perhaps quite unconsciously planted.

"In most labor disturbances, it is just at this point that serious trouble begins. A manager, superintendent, foreman, workman, or labor-union leader takes a position from which his pride, not his judgment, will not allow him to recede, and he must either surrender or fight, unmindful of the awful price to be

paid, not by him but by others, to sustain his personal pride. And yet often, if reason and tact were used in the early stages of the trouble, it would not be necessary either to surrender or to fight.

“Life and business are after all a good deal like a game of baseball. We all know men who take great credit to themselves for being so-called ‘self-made men,’ but there are no such men; men are made by what they go up against, and other men help to make them. In baseball, many a man has reached first base on a scratch hit or a fumble in the field, and has reached second base by a sacrifice hit by a batsman who, working not for an individual record but for the team, was willing to put himself out in order to advance the base-runner. And now, being at second, by a good piece of ‘stick work’ on the part of the next batter, the base runner is enabled to score. But such a one should always be humble, remembering that he reached first on a scratch hit or a fumble in the field, and that it was other men who helped him to bring in the run. It is exactly so in business—we are all debtors to other men.”

Attitude of the Enlightened Executive.—Call it by whatever name you will—team play, co-operation, mutuality—the great fact of the age we live in is the desire of all men, laborer and manager alike, to live a life that will accord with the standards of good citizenship, good work, and common fellowship. The executive who is sensitive to the great industrial values represented by this new spirit and motive in human life, becomes, as a matter of course, keenly interested in everything which promotes the health,

education, and general social well-being of the workers. Far from deriding as a theorist the man who works to abolish slums, sweatshops, overwork, and greed, the enlightened executive looks upon him as a real co-worker, for industry can do its best work only as workers are well-paid, well-fed, well-housed, and feel a real sense of their worth and of their manhood. To make men, then, is one of the big duties of industrial organization.

All too frequently the opposite viewpoint is the one foremost in the minds of some executive. He looks contemptuously upon the efforts of those who spend their lives seeking to ameliorate the working conditions of laborers in general, and his own employees in particular. In fact, in many cases he is openly hostile to their activities. He argues that he is able to take care of himself; he needs no outside assistance in keeping himself fit physically, no advice in regard to his living conditions; and if the men working for him are not content with the conditions provided in his shop and their environment in their homes, it is no concern of his. Let them take what they have or go elsewhere.

Just such an executive is that one who, when asked recently how the industries of the country were going to provide against the probable future demands of labor, replied that "an example should be made of some of them in selected localities. The average workman—in my plant, at least—is little better than an ignorant savage; a few of them should be shot as a warning to the others, and we'd hear no more fol-de-rol from such brainless agitators as yourself."

Fortunately, such men are rare, and becoming rarer with pronounced rapidity. The opposite type is far more familiar today. Scarcely a newspaper or magazine can be picked up that does not contain items describing the action of this or that plant toward the promotion of team play among its workers.

Conservation and creation are the biggest interests of all thinking men and women. To promote conservation is the task of science. To promote creation, invention, betterment, is the task of the democratic spirit. Science and democracy, co-operating in the interest of industry, will yet work changes and benefits only partially glimpsed, as yet, even in our most advanced industrial organizations.

CHAPTER XIV

GROUP INSURANCE

Responsibility of Employer.—How to mitigate the suffering which is prevalent among the great mass of the population because so many do not make adequate provision for vicissitudes, on account of irregularity of earnings, lack of foresight, or other causes, is one of the most urgent of social problems. Moreover, it is a problem the solution of which must tend not only to provide aid, but to prevent undermining of the character and the thrift of the individual.

When once the possibility of dealing with the main causes of irregularity in earnings (accident, sickness, unemployment, old age) on actuarial principles, shall be clear; when it shall be certain (as experience has already, in some cases, obviously shown) that workmen themselves will not insure; and when the sense of social sympathy and duty (call it altruism, if you will) shall have become so strong that provision of some sort is insisted upon—then, it seems the only solution will be to make the employers responsible. Let them do the insuring, paying premiums from time to time which will make it possible for a death benefit to be paid to widows and orphans, or a pension to the disabled workmen themselves, says the great modern economist, Professor F. W. Taussig.

Such a plan will have far-reaching effect, however, only if it is made of compulsory and universal application, and if the mere fact of employment fixes the obligation of the employer, irrespective of any agreement between him and the employee.

"Relief Departments" Inadequate.—Aside from such legal enactments as the Workmen's Compensation Acts, for many years the only systematic provision was that made by some of the great railway companies through their relief departments, in which the principle of insurance is applied not only to accident, but to sickness and old age. These relief departments are not regarded with favor by the majority of workmen; the funds are secured chiefly by deductions from their wages—even though, to be sure, substantial contributions are made by the companies—and membership, while it is supposed to be advantageous, is apt to be virtually imposed upon the employees. None the less, these departments have vastly improved the situation; for assured provision for the mass of human wreckage—especially when employment is hazardous, as in railroad work—by whatever process secured, is a great social gain.

Group Insurance Plan.—Many plans for supplying the necessary aid have been proposed, and of these the plan called Group Insurance deserves our special attention. Briefly stated, it is a plan to insure, in one group, all the employees of one employer, and, when conditions permit, all employees are eligible, without individual medical examination, under one blanket contract issued to the employer. New employees are automatically included as they arrive,

upon passing a simple health test. When an employee leaves the firm, his insurance automatically ceases.

The premiums are paid monthly by the employer, and the insurance is payable to the beneficiary named by the employee. Quite frequently the amount of life insurance per individual is fixed at the annual wage each workman receives; the maximum that any individual may receive is generally placed at \$3,000. In practically all the blanket contracts, the insurance is enough to provide for sickness and funeral expenses and still leave a comfortable balance for the immediate needs of the beneficiary. For this system recognizes the fact that, in the case of the great mass of population, the death of the wage-earner means pecuniary hardship for the remaining members of the family, and the concomitant expenses bring a heavy drain on slender savings, or the alternative of an appeal to charity, public or private. The dread of such a contingency hangs, like the sword of Damocles, over every workman's head. His earnest hope, of course, is that those dependent upon him will be well fixed in life even when he is no longer present to support them. Group insurance aims to meet the requirements by providing that the insurance benefit be paid in yearly, quarterly, or monthly installments according to the convenience of each party. For all practical purposes, then, group insurance is in essence a continuance of the pay check, made out to the family, for a full year, in the event of the death of the workman while in service—during which time the employee's dependents would find

opportunity to adjust themselves to the changed conditions following the death of the bread-winner.

Employer's Constructive Interest.—In other words, group insurance demonstrates the employer's constructive interest in the employee and in his family. Often the employers have taken the opportunity to reward service and constancy by proportioning the amount of insurance to the length of each workman's period of service. A graduated amount of insurance, increasing (let us suppose, as a matter of convenience) at the rate of 10 or 15 per cent per capita for every additional year of service, becomes to the worker's dependents, when he dies, a reflection in dollars and cents of the value of his life.

Cost to Company.—The cost of this insurance to the company, varying, of course, with the age and the annual salary of each employee, is not more than $1\frac{1}{2}$ per cent of the annual payroll exposed, according to the experience of one of the large insurance companies. This is a gross cost, it must be added, and is subject to some slight reduction by premium refunds in the form of annual dividends paid to the employer. This means—to use concrete figures—that \$1,000 life insurance on the group plan will not cost materially more than \$1.00 a month.

Special Advantages.—The advantages of life insurance under the group plan are obvious. In covering many life risks under one blanket contract, promoters of the group plan offer insurance much cheaper to the concern that pays the premium than it could ever be offered under the ordinary insurance contract. Also, a considerable proportion of the workmen can

avail themselves of insurance under the group plan who never could pass the medical examination that every individual must take before obtaining life insurance under the usual separate policy. In Massachusetts and other states in which the insurance laws require medical examination of every applicant, the scrutiny of inspectors is a necessary preliminary to the granting of the policy. But elsewhere more lenient rules permit employers to secure life insurance for workmen who, not being able to meet the insurance companies' examination individually, could not purchase an insurance policy at any price. The presumption is that the medical examination protecting the company against adverse criticism is a precaution which is unnecessary if all the members of a large group of men who are able to perform the daily duties of their occupation, are covered; the smallest staff of employees considered is 100—in the case of some companies, 250.

Preliminary Investigation of Firms.—Before group insurance is granted, a thorough investigation of the concerns is undertaken and a preliminary report is made upon the following topics, which are a few of the many taken into consideration:

What portion of the employees have a yearly vacation with a continuance of salary during vacation?

How many common laborers are there, and what sort of work do the different ones do?

State the youngest age at which employees are engaged, and the percentage of employees above fifty years of age.

Have there been any strikes during the last five years, and if so, give cause?

State approximately the number of each nationality represented among the employees.

Describe the buildings, and precautions against fire; condition of toilet and wash rooms—are they clean, well-lighted, and sanitary? Are the wash rooms well provided with soap and towels?

Give full information in regard to drinking water—is it filtered? How often is it analyzed Are the general provisions sanitary?

A knowledge of the matters of fundamental importance in connection with the well-being of the employees is absolutely necessary in insurance, and the companies are loath to deal with employers who cannot answer satisfactorily the questions given above, and others like them.

Loyalty and Co-operation.—The group-insurance method promotes loyalty and co-operation—and they spell efficiency. It makes the employee feel that a special interest is being taken in his welfare, and consequently stimulates a desire on his part to please the company and to avoid any altercation. An attractive certificate is presented to each individual employee; this certificate, which bears the name of the employee and of his beneficiary, and which includes an appropriate expression of the employer's good will—shows the workman to be insured for a substantial sum, in evidence of the employer's interest in him. The certificate becomes void only when the insurance contract terminates, or if the employee leaves the firm.

Successful Experiments.—Many companies have experimented with this plan and, according to their

testimonials, have found its operation satisfactory. Montgomery Ward & Company, Chicago, employing 2500 workers, has carried group insurance since July, 1912; the Studebaker Corporation has insured the lives of 10,000 workmen. The Santa Fe Railroad has also been operating under this plan.

Limitations of the System.—Because of its very operation group insurance can be employed only by those firms employing not less than one hundred men. Consequently group insurance at best is applicable in only a limited field. Moreover, this plan offers an insurance on the life of the workman, whether his death be natural or accidental—it furnishes no insurance against the many prevalent causes of irregularity of earnings: for example, sickness, old age, and unemployment. In short, group insurance does not provide social insurance—and it is social insurance that must help solve this great social problem.

True, group insurance may act as a supplement to such insurance. It is hardly conceivable that group insurance may be made compulsory and universal, for the very conditions of this kind of insurance operate to the contrary. There is no doubt that as a means of inspiring loyalty and co-operation it is valuable, for in its limited sphere it has proved successful from an economic, as well as from a social, standpoint.

Frankly, group insurance has not wholly “filled the bill”—what is needed is a compulsory form of insurance, of universal application, which will make adequate provision not only in case of death, but in the exigency of old age, unemployment and sickness.

CHAPTER XV

INDUSTRIAL AND SOCIAL INSURANCE

Industrial Democracy.—We live in a progressive age in which the initiation of social experiment and the triumphs of social legislation are proclaimed to the whole world. The industrial-insurance movement is an attempt to solve certain new problems arising from new industrial conditions. Modern productive methods, calling for large bodies of workmen in factories and demanding great amounts of capital, have magnified the difference in position between employer and employee, and have emphasized the development of a working class. The special problems of that class have been brought into greater prominence.

Everywhere, under democracy or under monarchy, poverty is debasing; everywhere the relations of capital and labor are similar, and there is a similar social disquietude over real or fancied grievances. The safeguarding of the economic position of the workmen by elimination of fluctuation of income is highly important. The interruptions of earnings, resulting from sickness and accident, may be eliminated or reduced, the hardships and distress of a workman and his dependents may be lessened, the day of old age may be made secure and free from the stigma of

pauperism. Legislation to secure these ends has been widely secured.

We can not intelligently believe that in some mysterious way democracy will tend automatically to cure industrial evils or to solve industrial problems. Rather we should bear in mind the fact that industrial democracy has not yet been achieved. Men are frequently under the dominion of industrial conditions which inexorably defy statutes, constitutions, and bills of rights. Unless the workman can negotiate on equal terms for his labor (the only commodity that he has to offer in the world's market) unless there is contractual equality, mere political equality may be a mockery and a delusion—in fact, his political rights may even be surrendered as a part of the consideration in contract labor. But through some social legislation based upon principles of equity and equality, we may gradually advance toward real industrial democracy. And when we once begin to realize what that democracy is, we shall never again be tempted by any phantom substitute.

Industrial Insurance.—Before proceeding to discuss the various legislative enactments thus far achieved, I wish to consider that form of insurance offered by the large commercial companies which deal in that life insurance known as Industrial or Group Insurance. Industrial insurance is so called because the system is primarily designed to meet the needs of wage-earners employed in manufacturing industries—the weekly premium payments coincide with the weekly payment of wages and salaries. The system is sufficiently elastic to meet the needs of the

most humble laborer, even if he be advanced in years, as well as the requirements of the more prosperous mechanic or skilled workman who is able to pay premiums for enough insurance to provide for more than the immediate needs of his family after his death.

The system also provides for family insurance on a comprehensive plan; every member of a family, at ages one to seventy, if in good health is insurable. A special form of this type of insurance has been developed under the name of Group Insurance, which is discussed in the preceding chapter.

Problem of the Wage-Earner.—The situation is this: Either a large class of wage-earners receive a wage that is not sufficient to enable them to make provision for the future, or through lack of thrift and foresight they fail to make that provision. In one case they suffer grave injustices; in the other they wrong society by wasting the reserve that should be accumulated, and in time of need have to receive from the prudent and thrifty various kinds of relief in the form of charity. But even if the fault were entirely that of the wage-earner, the problem of finding some system wiser, more practical, and more scientific than the present would remain. We ought to look for some disposition of the burden which would be less odious to the worker, and less onerous to society—even if our effort should result in compelling the thriftless wage-earner to provide for a rainy day.

Growth of Social Insurance.—I. M. Rubinow has produced economic statistical evidence which seems

to force the conclusion that if the general status of the wage-earner's life is much below the standard of physiological necessity and economic efficiency, surely he will seldom be able to bear up under conditions that result from an interruption of income. In short, conditions in the United States have been responsible for the growth of the social-insurance movement in this and all other industrial countries.

Results in Europe of Insurance Legislation.—In Europe the rapid development of the complex body of legislation with respect to social insurance has, according to Mr. I. M. Rubinow's admirable summary, produced the following result:

(1) Accident compensation or accident insurance has been established practically throughout Europe, and in many British colonies.

(2) Compulsory sickness-insurance has been introduced in about one half of the large countries of Europe: namely, Germany, Austria, Hungary, Norway, Great Britain, Servia, and Russia, and voluntary subsidized sickness insurance in France, Belgium, Denmark, Sweden and Switzerland.

(3) Compulsory old-age insurance exists in Germany, Luxemburg; old-age pensions in Denmark, Iceland, Great Britain, France, Australia, and New Zealand; and voluntary subsidized state systems of old-age insurance in Italy, Belgium, Servia, and Spain.

(4) Unemployment insurance by means of subsidies to workmen's voluntary organizations, is rapidly spreading in the large European cities. It exists by national law in Norway and Denmark, and the first compulsory unemployment-insurance system has been established in Great Britain.

(5) The beginnings of a national system of widows' and orphans' pensions have been made in Germany.

Kinds and Effects of Insurance.—The essential subdivisions of insurance now consist of these five branches: industrial accident; sickness; old age and invalidity; insurance of widows and orphans; and unemployment. A sixth form has been developed in the United States—soldiers' insurance.

The following excellent summary of the result of insurance, has been made by R. M. Woodbury, in his book, "Social Insurance":

Compensation for the injuries and deaths caused by accident removes from the shoulders of the injured man and his family the severe economic losses for which, in the majority of cases, they are not responsible. Workmen's compensation eliminates the wastes of the present system of employer's liability, and gives adequate compensation at a reasonable cost. Indeed the aims of a workman's compensation act may be reduced to the following:

(1) To furnish certain prompt, reasonable compensation to the victims of work accident, and to their dependents.

(2) To free thousands from the delay, cost, and criticism incident to the great mass of personal-injury litigation heretofore burdening them.

(3) To relieve public and private charity of much of the destitution due to uncompensated industrial accidents.

(4) To eliminate economic waste in the payments to unnecessary lawyers, witnesses, and casualty corporations, and the expense and time loss due to trials and appeals.

(5) To provide a method whereby a one-hundred-cents share goes to the injured workman out of every dollar paid out by the employer for that purpose; premium rates automatically adjusted to actual cost.

(6) To supplant concealment of fault in accidents with a frankness of spirit in the study of causes, resulting in good

will between employer and operative, lessening the number of preventable accidents, and reducing the accompanying cost and suffering.

(7) To furnish State Control of statistical information and education in accident prevention.

Sickness Insurance.—Compulsory insurance against sickness protects the workman against the disastrous consequence of a temporary or complete discontinuance of income. Throughout the world, the compulsory principle in sickness insurance has been tried and found effective in accomplishing the objects for which sickness insurance is intended. Perhaps of all large industrial countries the United States is at present the only one in which as yet compulsory sickness-insurance is utterly unknown. Provision for old age makes the lot of the aged workman free from anxiety in regard to the shame of the poorhouse. Conditions of life are made more secure, and the individual is protected against the principal contingencies that are likely to precipitate below the line of decent or adequate subsistence those who are affected. Insurance also reduces the disparities and irregularities of the income of the individual.

Economic Aspect of Social Insurance.—Furthermore, fruitful causes of discontent among the working class are removed by this system. Under present methods of settling compensation for accidental injuries, friction between employer and employee is apt to arise. The amount of compensation is a question, not of the equities of the case, but of technical legal liability. To press a claim means, too often, the loss of position for the workman. The pol-

icy of the insurance company, to keep the benefit at the lowest legal minimum, is substituted for the more reasonable policy which an individual employer might prefer. To quote again from the same source:

The advantages of each branch of insurance must be compared with the cost which will thereby be placed upon industry. The analysis of the economic incidence of the burden of insurance, in general shows that there is little danger of a serious effect upon industry. The cost of insurance is so small a proportion of the total cost of production that disastrous consequences to industry are not to be feared. In some industries the cost may be shifted to the consumer. In others the added cost will be met by improvements in processes and by kindred economies. Difficulties would, at the worst, be limited to a few industries and a few establishments. The economic burden of insurance and the pains of the shifting process do not represent a very great social cost.

The fear that thrift among the working classes will be destroyed is in large measure groundless; compulsory insurance will rather encourage and stimulate thrift. The frequency of serious accident in Germany has declined since the introduction of compulsory insurance. The imposition of the cost of accident upon the employer encourages the prevention of accidents. Remote social effects give no cause for apprehension; on the contrary, the balance of advantage is in favor of the policy of compulsory insurance.

This discussion of the economic aspect of social insurance has necessarily been of a general nature. There are a multitude of questions of detail which must be answered, many specific problems must be solved, before a given measure can be approved. For workmen's compensation in this country, a special difficulty which must sometimes be removed is that of constitutionality. Some states have tried to avoid a con-

flict with the constitutions by making it optional with the employer to elect workmen's compensation, making it at the same time to his advantage to do so, by removing the usual common law defences against employer's liability.

The Aim of Compulsory Insurance.—Then there is the question of the organization of insurance: Shall employers be requested to insure in a state fund, or be forced to form employer's associations, or be permitted to insure in private mutual or stock companies? How are the rates to be controlled? Shall awards be made by an administrative commission, or by local boards of arbitration? How is general interference with the administration of the law by the courts to be prevented? As to the first question—the answer is suggested by the criticism directed against subsidized systems, which eventually applies to all voluntary systems without subsidy. This criticism may be summarized as follows:

- (1) The voluntary system is slow in extending, and it never extends far enough.
- (2) It is not satisfactory as to services furnished.
- (3) It places too big a share of the burden upon the wage-earning class.

The shortcomings just mentioned—or at least some of them—the compulsory system aims to correct.

Meaning of the Movement.—These are a few of the many questions of detail that arise in connection with workmen's compensation legislation. Compulsory insurance against sickness or old age or in-

validity has not as yet been seriously pressed in this country. Proposals for old-age pension legislation have indeed been made, but discussion has not yet reached the stage where it is a question of how the object sought may best be obtained.

Questions of administration or organization, important as they may be, are not usually fundamental. A good organ of administration may, indeed, make the difference between comparative success and failure. Cheapness of insurance, together with the effective prevention of accidents, may have considerable effect on the burden that accident compensation places upon industry, and these features may be secured by means of effective administration. But the fundamental question of the social advantage of compulsory-insurance legislation, as compared with the weight of the cost, can be answered without solving all the problems of detail.

The whole movement is part of a tendency to solve the problem of a more equal and equitable distribution of the increased wealth of this country. The elimination of poverty and the alleviation of the hardships of those less fortunate among us, are the questions of the coming age. The provision of compulsory insurance against accident, sickness, old age and invalidity, unemployment, and of insurance of widows and orphans would be a definite step toward the realization of these ideals.

CHAPTER XVI

HOUSING

The Housing Problem.—Every American city has its own housing problem, in many respects different from that of every other city; yet all the problems are alike in so far as there are certain underlying conditions common to all. Generally, housing evils—occasioned primarily by lack of guidance of urban growth, poor planning of buildings, and faulty construction—are to be found in dangerous and disease-breeding privy vaults, in lack of water supply, in dark rooms, in conditions of filth and inadequate methods of disposal of waste, in fly-borne disease, in cramped and crowded quarters, in lack of privacy in buildings of undue height, in inadequate fire protection, in the crowding of buildings too close together, and in the too intensive use of land. And all these evils are aggravated by the greed of some landlords, the carelessness of some tenants, and the neglect of the laws of hygiene on the part of both of them.

The housing problem that confronts society today may perhaps be best viewed in its application to four sets of triangular relations, which the following catch-words suggest: Future, present, and past; sanitary, structural, and social; landlord, tenant, and

community; and, finally, existing conditions, laws, and their application.

Future, Present, and Past.—If prevention is better than cure, then it must be regarded as the first duty to safeguard the future—to prevent the erection of buildings which are not suitable for people to live in, and which will later become a menace to the community. Yet it is the living present that, above all, demands action and requires actual achievements. For those in the community least able to protect themselves must be provided a decent living and the means of maintaining a proper standard of comfort and decency. Yet all this by its very nature involves and necessitates remedying the mistakes, both of commission and of omission that the past has left as part of its heritage. Either the older buildings must be made fit for human habitation, or their evil career must be ended; the neglect, carelessness, and ignorance of preceding generations must be repaired, and the repetition of these faults must be made impossible.

Sanitary, Structural, and Social Betterment.—This is to be accomplished by sanitary measures, accompanied (it may be added) by those of a structural and social significance. Buildings must have adequate light and sufficient ventilation, as well as a sufficient water supply; and garbage and other waste materials must be collected with sufficient frequency. All that the ancient knowledge and the modern development of the science of sanitation has taught us should be incorporated in the buildings.

In addition, the construction of the buildings must

be so planned as to provide reasonable protection in case of fire. It is in viewing the social aspect of housing reform, however, that we are confronted with a vast host of questions, among which may be mentioned—to name but a few salient ones—the question of overcrowding and congestion of population, the lodger evil, the immigration problem, the lack of educational opportunities, the sweating system, and the difficulty of ordinary social intercourse. The housing problem cannot be considered apart from these—each evidently a problem in itself—and the solution of any one is conditioned upon the solution of the housing problem.

Landlord, Tenant, and Community.—The relation of landlord, tenant, and community presents many complications. We must clearly recognize that whereas the landlord has a right to a legitimate profit on his investment, he must not be permitted to extort an undue profit at the expense of the tenant. And just as there are good landlords and bad landlords, so there are good tenants and bad tenants, and the adjustment of necessarily strained relations must come through the medium of education. And back of these parties is the community, whose existence is but the corporate existence of its component parts: the tenant and the landlord. And any injury caused to the social fabric by the effect of bad housing in producing vice, crime, poverty, disease, and death, is an injury to the community—but, more than that, it is an injury to society and to our very civilization.

Existing Conditions.—Those who seek a remedy

must base all their efforts upon carefully ascertained knowledge of the conditions that require remedy. Whatever laws may be put into effect, they must be the result of carefully worked out practical considerations of the problems involved, and must be adapted to the peculiar local conditions that demand remedy. But to adapt legislation is not of itself sufficient; laws not only must be put on the statute books, but they must be promptly and thoroughly enforced—a commonplace that loses none of its value by constant repetition. Naturally, however well laws may be drawn up to remedy actual evils, if they are un-enforced they are worthless.

The housing problem may with some degree of truth be defined as a "house famine" of varying but undoubted intensity all over the country. But it is more than an economic problem—the question is not only one of demand and supply, of furnishing a sufficient quantity of homes; the kind of home is also of vital importance. We may just as well frankly confess, at the outset, that there is a considerable part of our population who will live in any kind of dwelling that they can get, irrespective of how unhygienic it may be. In other words, it is not enough merely to enable people to live in houses fit for human habitation (according to our enlightened standards!), but we must prevent other people, who either do not care for decent conditions or who are unable to obtain them, from maintaining conditions that are a menace to their neighbors, to the community, and to civilization.

The Program.—A program for housing reform,

which must, by its very nature, tend to solve the problem as here presented, would operate somewhat as follows: First among essentials is a campaign of education—committees of citizens, national and local organizations, to make possible a thorough study of conditions and to present the facts clearly and consistently until adequate action shall have been taken. Every one must be reached, poor and rich, tenant and landlord, workman and legislator, lawyer, minister, and mechanic, in order that proper legislation may be secured and administered.

But legislation alone will not solve housing problems, which are of so manifold a nature, and which have so many manifestations, that much must evidently be done before right conditions can be established. The question that confronts us all is, What method will give the largest results with the least expenditure of time and energy? That method which will bring in 90 per cent of returns—not 10 per cent—is obviously the method. But such a method can be evolved only after many experiments have been made and many acid tests have been applied.

Experience has shown, however, that the largest results have come from legislative action, and we must remember that it is futile, or worse, to adopt advanced methods of reform before certain fundamental evils have been remedied, before the community has entered upon even its elementary stage of development. In other words, we must get rid of our slums before we build garden cities; we must prevent people from living in cellars before we concern ourselves with changes in the methods of taxa-

tion; we must make it impossible to build dark rooms in new buildings before we urge the government to subsidize buildings. When these fundamental things have been done, then can effort be profitably expended in the other directions mentioned.

The legislation along the lines mentioned must, above all, be of an accepted kind—namely in the form of housing laws. The time has come when we should regulate all buildings in which human beings live; the laws should render a dark hall quite as illegal in a modern high-class fireproof hotel as in a common lodging-house. It is not merely tenement-house or building laws that are necessary, but also laws of a far wider scope, laws which affect all buildings in which people live, whether those buildings be private dwellings, apartment houses, tenement houses, or bachelor apartments. Just such a law, Lawrence Veiller has succeeded in drawing up in his “Model Housing Law”^{*} regulating the construction of new buildings, and providing for the proper maintenance of all buildings and for the alteration and improvement of the old buildings. Indeed specific sections cover every essential feature of a model housing law, and they are so arranged that by the changing of a few words here and there they can be rendered adaptable as a state law or city ordinance in any community.

City-Planning Necessary.—To a greater or less degree, according to circumstances, the housing problem calls for city-planning: that is, the defining of

^{*} Model Housing Law, by L. Veiller, Russell Sage Foundation, N. Y.

zones in which buildings of specific character and height alone may be erected, the setting apart of land for public buildings, various classes of factories, and for special purposes, and the establishment of ordinances, applicable in the case of particular areas, limiting the amount of "built up" space and the density of population. A specialized development of this system is the Garden City plan, which aims not only to reduce the congestion of existing cities by withdrawing their factory population, but also to construct cities of ideal plan in which congestion shall be perpetually prevented. The public costs are paid out of the ground rent and the constantly growing unearned increment of the land. Thus co-operatively an industrial city is founded without congestion, land speculation, or paternalism—a city in which natural living, well-being, and democracy apparently work consistently together.

Industrial Housing.—To provide the right type of workmen's houses is a phase of the problem that calls for no mean architectural skill and accomplishment. Cheapness of construction, permanence of materials, economy of maintenance, adaptability to conditions—these are some of the factors that enter into the problem. The increasing success of experiments in cheap construction (especially of those experiments accompanied with restriction of speculation and improved and cheapened transit) progressively tends to place within the reach of more and more families the ownership of a desirable suburban home. And as to the city worker who must live in a tenement, he also should be given the right type of dwelling.

Yet it would be folly to provide houses for workmen without making provision for their proper management. It is conceivable that a sort of clearing house for tenant and landlord might be instituted—a plan something like that according to which houses are built by employers for their workers. And closely connected with this phase is the improvement of transit facilities, which in some cases solves the difficult land problems that arise.

Undertakings in the field of housing reform must vary widely in their nature in different cities, depending as they do upon the local forces at work, the character of the leaders, and the local conditions. The mining camp, the factory village, the ghetto, necessarily differ both as regards their problems and with respect to potential remedies; in every case the local question is seriously complicated by the related social facts of immigration, industry, and poverty.

In America the agencies engaged in the erection of improved houses are all of a private nature; co-operation and public action are scarcely known in this country. The improvement of housing conditions is furthered by speculative builders controlled by a detailed and far-sighted housing law adequately enforced; real-estate and land improvement agencies catering to an intelligent demand, usually on the part of the moderately well-to-do tenant; philanthropic individuals or societies that build model dwellings; and employers of labor who remove their plants from city to suburb or country in order to provide for the welfare and efficiency of their employees. The accomplishments of these agencies, together with the re-

sults of housing legislation, public inspection, and sanitary improvements constitute America's contributions to the solution of the housing problem.

Methods.—Private enterprise accompanied with public control seems to be the method sanctioned by historical precedent. It has been assumed only too often that private enterprise, unstimulated, unregulated, unassisted, undirected, has not availed, its product being insufficient in quantity and inferior in quality. Public officials, on the other hand, can use their resources to meet the demand for more room, and to provide an effective check, when necessary, upon exorbitant rents; to set up a standard sanitary home that a workingman might reasonably expect; and to establish a model street of well-managed houses in every district, as an object lesson for other landlords. But matters of common objection in every municipality—an almost natural result of our system of government—prevent public action from being all-sufficient. Vexations of long standing and unjustifiable delays; red tape and inquiries in excess; regulations and restrictions not absolutely requisite, and fatal to successful building operations; too heavy financial terms; short terms of office; graft, "honest" or otherwise—all these retard public action. It is in a combination of private initiative and enterprise, public supervision and inspection, that we must seek the proper form of action.

Notable Housing Experiments.—Many housing experiments of varying importance and success have been performed. The most important of early ventures was the experiment of Alfred T. White, of

Brooklyn, N. Y., dealing with the "outside-staircase buildings" erected in London in 1863 for working people. The venture of Mr. White resulted in the "home tenements," the tower homes, and the riverside buildings, housing in all some 2000 families. The features distinguishing these structures from other tenement houses are (1) fireproof staircases sunk into the front or rear of the buildings, open to the air, and extending in a semi-circular tower from the cellar to the roof; (2) entire absence of any interior communication from floor to floor by stairway or shaft; and (3) buildings only two rooms deep, so that each has abundant sunshine and air.

An important development for better housing in New York was the promotion carried on in 1896 by the Improved Housing Association of the City and Suburban Homes Company, with a capitalization of \$4,000,000 to buy land in the poorer sections of the city, where several model tenements were erected. These were let at moderate rentals to workers of all nationalities, and the results have very clearly demonstrated the fact that decent housing accommodations can be provided on a strictly business basis for people of slender means. Enough has been earned, after expenses have been deducted, to warrant dividends at the rate of 4 per cent on the capital stock issued, as well as to provide a fair surplus for the company. Moreover, this firm has undertaken not only the management of more than a dozen privately owned tenement properties, but also the operation of considerable suburban property at Homewood. An interesting feature of the plan calls for the carrying

of life insurance, so that in case of the death of the purchaser the property is paid for by the insurance.

Enough has been done to justify the assertion that the great change in housing methods will come from the substitution of reasonable business returns for exploitation and excessive profits, from the transfer of housing from the field of speculation of that corresponding to legitimate manufacturing. In other words housing is a big business, and should be handled as big business is handled. Fortunately there is in existence the National Housing Association, an organization that is in a position to lend unity and impetus to the movement and to provide the wherewithal of an active campaign. Workmen's houses in America must be financed and constructed by employer and employee, or by building concerns or rental associations largely created for that purpose, or urged or managed by the larger interest of capital.

Industrial Housing Developments.—Robert Leavitt Davison has compiled in the *Architectural Review* for April, 1917, a check list of the principal housing developments in the United States which are operated according to some one or more of the four principles mentioned in an earlier chapter.

First there are those houses built by employer for employee and either sold at cost on the installment plan, or rented at between \$2 and \$3 per room per month. A list of the companies adopting the plans in this class is given below.

- (1) The Goodyear Tire and Rubber Company has

built "Goodyear Height" in Akron, Ohio. The lots and houses are sold at cost on the installment plan, and a special diminishing life insurance is carried by the purchaser so that in case of death the property is paid for by the insurance. Details of this plan are given later in this chapter. A similar scheme is adopted by the City and Suburban Homes Company, of New York.

- (2) Atlas Coal Company, at Pittsburgh, Pa.
- (3) Barre Wood Combing Company, at Barre, Mass.
- (4) Talbot Mills, at Billerica, Mass.
- (5) Remington Arms Company, at Bridgeport, Conn.
- (6) Cleveland Cliffs Iron Company, at mining towns.
- (7) Cornell Company, at Cold Spring, N. Y.
- (8) Colorado Fuel & Iron Company, at mining towns.
- (9) Cumberland Mills, Maine.
- (10) Duluth, Missabe, and Northern Railway Company, at Proctor, Minnesota, and other mining towns.
- (11) Sexton Manufacturing Company, at Fairfield— which rents four-room cottages to the girls who work for the Company; all the cottages are heated from a central heating-plant. A central dining and reception hall is provided.
- (12) Dennison Manufacturing Company, at Framingham, Mass. The construction has been carried on under the name of the Framingham Associates, with money furnished by the co-operative banks.
- (13) Lehigh Coal and Navigation Company, at Hants, Pa.

- (14) Draper Company, at Hopedale, Mass. The town was laid out in accordance with advanced Garden City principles, and from an architectural and landscape standpoint is one of the most interesting examples of Garden City work in the country.
- (15) American Woolen Company, at Lawrence, Mass. The Company rents houses both to employees and to the general public.
- (16) N. O. Nelson Company, at Leclaire, Ill., has also rented to employees and the general public.
- (17) Ludlow Manufacturing Company, at Ludlow, Mass. Rent is \$1.50 per room per month.
- (18) Amoskeag Manufacturing Company, at Manchester, N. H. The Company also supplies land upon which employees may build houses with money borrowed from a bank. The mortgage on the lot is canceled at the end of ten years if the tenant is still in the employ of the company and living on the lot.
- (19) American Viscose Company, at Marcus Hook, Pa. Well-known principles of Garden City arrangement were applied to the laying out of the village.
- (20) American Rolling Mill Company, at Middleton, Ohio. A bath house is provided for every four families.
- (21) Pittsburgh Crucible Steel Company, at Midland, Pa.
- (22) Delaware, Lackawanna, and Western R. R., at Nauticoke, Pa. The walls and floors are cast

in metal moulds of the Morrill system of building.

- (23) Plymouth Cordage Company, at North Plymouth, Mass.
- (24) New Jersey Zinc Company, at Palmerton, Pa.—mining town.
- (25) Peacedale Manufacturing Company, at Peacedale, Pa. The Company began housing its employees in 1850.
- (26) Pelzer Manufacturing Co., at Pelzer, S. C. The town is not incorporated, but is held as private property by the Company.
- (27) John B. Stetson Company, at Philadelphia. This Company gives stock in a building and loan association to its employees, in return for efficient service.
- (28) Pittsburgh-Buffalo Company—mining towns.
- (29) Lawton Cotton Mills Corporation, at Plainfield, Conn. The town is located in a rural district, and many of the employees live on farms.
- (30) Pullman Company, at Pullman, Ill. Furnishing a warning against the dangers of paternalism.
- (31) J. A. Roebling's Sons Company, Roebling, N. J.
- (32) Maryland Steel Company, at Sparrows Point, Md. The Company owns the town, and has provided fire and police departments at its own expense.
- (33) American Waltham Watch Company, Waltham, Mass. This Company does not at the present time build houses.
- (34) Westinghouse Air Brake Company, at Wilmerding, Pa.

- (35) Witherbee Sherman & Company, at Minerville, N. Y.
- (36) The Norton Grinding Company's Indian Hill Development, at Worcester, Mass. The property is sold to the working men for a 10 per cent first payment, and the mortgage is held by the Company. The cost of house and land to the Company, without profit, establishes the purchase price. Further details appear later in this chapter.

The second plan includes those companies operating through subsidiary real estate companies: (1) The U. S. Steel Corporation is the most important of this group. It has provided houses for its employees in many mining towns, conspicuously at Fairfield, Alabama, where the transactions are conducted through the Tennessee Land Company, and at Gary, Ind., where the business is carried on through the Gary Land Company. (2) Niagara Falls Power Company, at Niagara Falls, N. Y. (3) American Sheet Steel Company, at Vandergift, Pa. The Company laid out the town site in 1895, and put in all improvements, such as pavement, water, and so on. Lots were sold to employees, who borrowed from building and loan associations the money with which to build. (4) Jones & Laughlin Steel Company, at Woodlawn, Pa.

A third plan in operation is that whereby workmen's houses are financed and constructed by building concerns or rental associations largely created for that purposes. Here are some of the companies that have adopted this plan:

- (1) Albany Home Building Company, at Albany, N. Y. This was begun by the Chamber of Commerce in 1910.
- (2) Billerica Garden Suburb, Inc. An attempt is here being made to establish a co-operative or co-partnership Garden City Association, after the English model. Houses are built for rental or sale on the installment plan.
- (3) Westerly Gardens, Inc., at Bound Brook, N. J.
- (4) Bridgeport Housing Company, recently organized by the Bridgeport Chamber of Commerce.
- (5) Cincinnati Model Houses Company. It is expected that the purchaser of these two-family houses will live in one side of the house and sub-let the other side. Weekly rentals for these houses are given later in the chapter.
- (6) Model Homes Company, Evansville, Ind.
- (7) Messrs. Bird & Son's Neponset Garden Village, at Walpole, Mass. Town planning principles are to be applied, including co-partnership.
- (8) Improved Housing Association, of New Haven, Conn.
- (9) City & Suburban Homes Company.
- (10) Octavia Hill Association, at Philadelphia. Its main business consists in fixing up run-down tenement property and renting it under improved conditions. The rent collectors are trained social workers who try to improve the home conditions of the tenants. Details are given later in this chapter.
- (11) Salem Rebuilding Trust, at Salem, Mass.

- (12) Virginia Highlands Real Estate Company, at Virginia Highlands, Va. It was the original intention to develop a co-operative suburb, but the actual development has been conducted along real estate lines.
- (13) Washington Sanitary Housing Company supplies cheap but adequate houses for the poorer class of tenants.
- (14) Ellen Wilson Homes, Washington, D. C. A combined improved housing association and social settlement. Details of this plan appear later in this chapter.
- (15) Woodlawn Company, Wilmington, Del.
- (16) Salvation Army has three small agricultural colonies where a small tract of land may be bought on the installment plan.
- (17) Ruth Haven. A home sponsored by Mrs. Grace Humiston and many prominent and wealthy men and women of New York City to provide a haven for girls who have fallen prey to the vice conditions in the "City without a Heart."

Of the buildings erected by purely philanthropic interests the Osborne Cottages, at Derby, Conn, provide an excellent example. Group homes for from two to four families were built by Miss Frances Osborne in 1913, and they have proved very popular.

And if we mention the Cumberland Mills, of Maine, which encourage housing by loaning money at fair rates, we shall have completed a very brief survey of the principal housing developments in the United States.

H. G. Wells, who is a sociologist even in his novels, represents his working people in "A Modern Utopia" as traveling in trams of lightning speed to homes located in a world entirely apart from that in which they work. That of course is utopian—but there is every reason to hope that, with the reconstruction after the great war, houses of the most approved pattern will be erected in devastated Belgium and France. And then—if not before—can we, also, who are viewing the world passing through a social revolution, witness the construction of houses that will really solve the housing problem.*

Applications of Housing Plans.—In the following pages I have summarized the more important points in the housing plans of several companies. All of these plans, with one exception, are at present in actual application. The exception, as noted, is in process of development at this writing. The plan, however, is sound and well worth studying.

Goodyear Tire and Rubber Company.—This Company, at Akron, Ohio, has erected 1000 houses on 350 acres; there is a city reservoir on the property and every natural beauty has been preserved. The average lot is 50 feet wide and 115 feet long.

Plan for Selling.—The Company has a plan whereby two mortgages may be placed upon a property. The first mortgage is for one half of the cost value, and is carried by the Metropolitan Life Insurance Company, of New York, with which arrangements have been made so that the payments due

* The reader will recognize the debt owed to the writings of Veiller, Thompson, and Ford, in the pages immediately preceding.

that Company are made to the Goodyear Company. A second mortgage is given the Goodyear Company for the balance of the purchase price. A small payment of 2 per cent of the purchase price is required at the time of the purchase, simply as an earnest of good faith on the part of the purchaser. The semi-monthly payment will pay off the second mortgage in ten years, and it will pay off the first mortgage in ten years more, the rate of interest being 6 per cent per annum. These periods are the maximum time allowed within which to pay for the property, but provision is made whereby extra payments may be made and any balance of payments due at any time may be paid off. Of course, all amounts paid over and above that specified semi-monthly payment will help reduce the interest charges, and will mean just so much less time required to clear the property.

The semi-monthly payments for the first five years are based on the real estate value of the property, which is 25 per cent higher than the cost value, and at the end of the fifth year, if the purchaser is still in the employ of the Company, and has made the payments as agreed, he still retains title to the property. The difference between the two values and the interest paid thereon is canceled by crediting his account with that difference. All payments thereafter are made on the basis of the cost price of the property. In regard to persons who are not Goodyear employees, the regular real estate practice of selling at a profit is carried out. There is no refund on the sale price. The minimum prices of houses vary from \$1800 to \$2500.

LABOR AND COMPENSATION

TABLE OF GOODYEAR HOUSES SHOWING PAYMENTS REQUIRED ON PROPERTIES AT VALUES GIVEN, ON THE BASIS OF "2 PER CENT DOWN" PAYMENTS.						
Cost -----	\$3600.00	\$3700.00	\$3900.00	\$4200.00	\$4400.00	\$4640.00
Real Estate Value -----	\$4500.00	\$4625.00	\$4875.00	\$5250.00	\$5500.00	\$5800.00
SEMI-MONTHLY PAYMENTS						
First 5 years_	\$17.44	\$17.92	\$18.90	\$20.25	\$21.32	\$22.48
Next 5 years_	14.54	14.95	15.76	16.96	17.77	18.75
Last 5 years_	6.44	6.62	6.98	7.51	7.87	8.20

TABLE SHOWING REDUCTION ON FIRST MORTGAGE, PROPERTY COSTING \$3700. REAL ESTATE VALUE \$4625, ON THE BASIS OF "2 PER CENT DOWN" PAYMENT				
FIRST MORTGAGE \$1850				
At the end of		Principal reduced by	Balance due	
1st year (Payment \$6.62 semi-monthly)		\$49.33	\$1800.00	
2nd year	"	52.41	1748.26	
3rd year	"	55.65	1692.61	
4th year	"	59.07	1633.54	
5th year	"	62.72	1570.82	
6th year	"	66.59	1504.23	
7th year	"	70.72	1433.51	
8th year	"	75.02	1358.49	
9th year	"	79.65	1278.84	
10th year	"	84.56	1194.28	
11th year	"	89.78	1104.50	
12th year	"	95.40	1009.10	
13th year	"	101.25	907.85	
14th year	"	107.47	800.38	
15th year	"	114.11	686.27	
16th year	"	121.15	565.12	
17th year	"	128.65	436.47	
18th year	"	136.57	299.90	
19th year	"	144.99	154.91	
20th year	"	154.91	0.00	

TABLE SHOWING REDUCTION ON SECOND MORTGAGE, PROPERTY
COSTING \$3700. REAL ESTATE VALUE \$4625, ON THE
BASIS OF "2 PER CENT DOWN" PAYMENT

SECOND MORTGAGE \$2682.50		
At the end of	Principal reduced by	Balance due
1st year (Payment \$11.30 semi-monthly)	\$113.57	\$2568.43
2nd year	120.56	2447.87
3rd year	128.04	2319.83
4th year	135.92	2183.91
5th year	144.32	2039.59
Difference between Real Estate Value and Cost Value		
	925.00	
Interest on Difference	250.78	863.81
6th year (Payment \$8.33 semi-monthly)	152.48	711.33
7th year	161.87	549.46
8th year	171.88	377.58
9th year	182.52	195.06
10th year	195.06	0.00

Insurance.—The Company carries fire insurance at its own expense. The home-owner may carry a diminishing life insurance policy, which, in the event of death, will pay for the mortgages. The semi-monthly payments on \$1000, the basis of insurance, vary from \$.30 to \$.95, as the age of the home-owner ranges from 21 to 55. This the employer repays for the single premium advanced by the Company. The single premium varies from \$57.94 to \$170.98.

Norton Company.—This company has established a colony at Indian Hill, Worcester, Mass. The terms of purchase are as follows: First, a certain percentage of the purchase price is required as initial payment. For the balance of the purchase price the purchaser gives two notes, one for \$1000, payable in twelve years at 5 per cent, and the other for the balance left after this payment, payable on demand, with

interest at 5 per cent. Both notes are secured by a purchase money mortgage.

To insure the payment of \$1000, the purchaser agrees to purchase in a co-operative bank 5 shares, and to continue payments thereupon until his deposits shall have matured in the sum of \$1000; this maturity, in local banks and at the prevailing rate of interest, occurs in about 11 years and 10 months.

The Company agrees not to make demand on the demand note so long as the purchaser shall continue to make monthly payments of interest to the Company, and also monthly payments (in accordance with his agreement) to the Co-operative Bank. The Company further agrees that if the purchaser shall die or become incapacitated within twelve years—

TYPICAL SCHEDULE OF MONTHLY PAYMENTS, NORTON
COMPANY.

Total purchase price.....	\$3851.50		
First payment of 10 per cent.....	385.15		
Balance—borrowed on mortgage.....	3466.35		
Amount due in 12 years, secured by time note..	1000.00		
Balance secured by demand note.....	2466.35		
Monthly interest during first 12 years.....	14.45		
Monthly payments to co-operative bank.....	5.00		
Total monthly payments during first 12 years...	19.45		
Monthly interest payment after 12 years.....	10.30		
Total loan.....	\$3466.35	Demand loan.....	\$2466.35
5 per cent....	173.32	5 per cent.....	123.32
1/12.....	14.45	1/12.....	10.30

provided that at that time he shall not be over sixty years of age—it will accept the surrender value of his Co-operative Bank shares in full payment of the time note.

The purchase price represents the actual cost of the house and land without profit to the Company. The original purchase price of the entire area was divided by the number of feet, to determine the base price per foot. To this was added a pro-rata proportion of the cost of improvements, such as sewers, highways, sidewalks, engineering expense, and architect's fees.

Rome Brass and Copper Company.—Riverdale Village was established at Rome, N. Y., by the Rome Brass & Copper Company. Houses may be either purchased or rented—and by persons outside the Company's employ, as well as by its employees. If, five years after purchase, an employee purchaser is still in the Company's employ, the profit is credited to the employee, and future payments are based on net costs. Otherwise, to the net cost there is added the usual profit for the real estate company, and first payments are based on this value. Cost of land is taken at a valuation of \$100 per acre; plus all developments, at \$300.

Plan for Renting.—Houses may be rented by any one under the provisions stated above. The last month's rent in any year is given to the tenant if no repairs on the house are necessary. If necessary repairs are slight, enough money to make these repairs is used and what is left is given to the tenant.

Plan for Selling.—Easy monthly instalments, to-

gether with the contribution which the Company makes (consisting of the usual real estate profit on that development), will pay for a house in about fifteen years.

Insurance.—Proper provision is made so that in case a man dies before he has completed his payments, his widow receives a deed to the property, free and clear. This insurance feature can be included in a purchase price if a weekly payment of about 20 cents is made for each \$1000 value in the property, the exact amount of the payment being dependent upon the age of the man at the time he makes the purchase.

Boarding House.—For unmarried men who wish to live economically and possibly do their own cooking, a boarding house is conducted.

Ellen Wilson Homes.—The plans for these homes—at Washington, D. C.—provide for a block of model dwellings—130 small houses, for 250 families, or a total of 1000 persons. The flats are to range in size from two to six rooms. There are to be shops run on the co-operative basis, a laundry, a day nursery, playgrounds, a library, a small hospital, an amusement hall, and suites for superintendent and nurse. As most of the dwellers earn their living by washing clothes, there is to be a supervised wash-house.

Management of the community is to be in charge of a trained social worker, and a nurse.

Financing of the required \$350,000 will be done by means of gifts and through donations of \$100 or more, which are to receive dividends, according to earning capacity, up to 5 per cent.

PRELIMINARY TENTATIVE RENTING SCHEDULE, ELLEN WILSON HOMES				
Type	Description	Rent per month	No.	Total
A	2-room flat, downstairs ..	\$7.50	20	\$150.00
	2-room flat, upstairs	8.00	20	160.00
A2	2-room flat, downstairs ..	7.50	12	90.00
	3-room flat, upstairs	10.50	12	126.00
B	3-room flat, downstairs ..	10.00	36	360.00
	3-room flat, upstairs	10.50	36	278.00
C	4-room flat, downstairs ..	12.50	28	350.00
	4-room flat, upstairs	13.00	28	364.00
D	5-room house	17.00	20	340.00
E	Store	5.50	4	22.00
	Store	7.00	4	28.00
	Store	9.00	4	36.00
	Flat	10.50	4	42.10
	Flat	11.00	4	44.00
F	4-room flat, downstairs ..	13.50	4	54.00
	6-room flat, upstairs.....	17.50	4	70.00
G	3-room and kitchenette, flat over alley.....	10.00	1	10.00
Total rent per month.....				2624.00
Total rent per year.....				31488.00
Yearly rebate.....				2624.00
Net rental.....				\$28864.00

Total investment \$304,505.00.

Net income on rents \$28,864.00 which is about 9½ per cent of investment.

Main building assumed to be self-supporting.

Cost of library building and maintenance—through gifts.

Cost of playgrounds, building apparatus, maintenance—through gifts.

Ground for above included in general investment.

Octavia Hill Association.—This has as its purpose to purchase, restore, and under-drain run-down, dilapidated, and unsanitary dwellings in the poorer sections of the city of Philadelphia. After these dwellings have been equipped and made suitable for habitation, the Association, either as owner or agent, manages them through the agency of trained social workers.

Plan for Renting Houses of its Own Construction.—This plan is the following:

1-family house (5 room, bath, and furnace) (16 in number).....	\$12.50 per month
2-family house (each apartment containing 3 rooms and bath) (12 in number)	10.00 per month
2-family house (each apartment containing 2 rooms, bath, and kitchenette) (4 in number).....	8.00 per month

Plan of Financing.—The plan includes the enlistment of the Philadelphia Model Homes Company—a separate corporation, whose capital stock is held by the Octavia Hill Association—as agents. Money is raised by the sale of first mortgages at 4 4/10 per cent.

Cincinnati Model Homes.—The following table shows the location and weekly rental of these homes:

Washington Terrace

(Colored)

3-room flat.....	\$2.12
4-room flat.....	2.85
Grocery	6.00
Music store.....	2.50
Assembly Hall.....	4.00
Shoe Shop.....	2.00
Barber Shop.....	1.50
Lunch Room.....	2.00
Billiard Room.....	3.00

Average rental per room per week:

(1) Counting bathroom as room55c.

(2) Not counting bathroom as room.....71c.

Annex (Colored)

3-room flat.....	2.32
4-room flat.....	2.59
Sewing room.....	1.50

Average rental per room:

(1) 54c.

(2) 70c.

East Kerper Avenue

(Colored)

3-room flat.....	2.50
3-room flat.....	2.25
4-room flat.....	2.75
Drug Store.....	5.00
House (4 rooms & bath)	3.25

Average rental per room:

(1) 59c.

(2) 77c.

Taft's Lane (Colored)

3-room flat.....	2.50
3-room flat.....	2.25
4-room flat.....	2.75

Lincoln Terrace (White)

3-room flat.....	2.50
4-room flat.....	3.00
4-room flat.....	3.25

Norwood Group No. 1

(White)

1 multiple dwelling

2-room flat.....	2.50
4-room flat.....	3.25
4-room flat.....	3.75

Average rental per room:

(1) 66½c.

(2) 85c.

Norwood Group No. 2

(White)

1 multiple dwelling

3-room flat.....	2.75
4-room flat.....	3.25
4-room flat.....	3.50

Average rental per room:

(1) 67c.

(2) 86c.

Oakley Group (White)

1 multiple dwelling

3-room flat.....	2.87½
4-room flat.....	3.25
4-room flat.....	3.75

Average rental per room:

(1) 69½c.

(2) 89c.

Avondale Group (White)	Chapel Street (Colored)
5 double-detached	3 double-detached
3-room flat..... 2.00	3-room flat..... 1.75
4-room flat..... 2.50	4-room flat..... 2.25
5-room flat..... 3.00	
Average rental per room:	Average rental per room:
(1)..... 50c.	(1)..... 44c.
(2)..... 63c.	(2)..... 57½c.

Summary:

Totals rentals per week.....	\$937.10
Total rentals per week for rooms...	799.60
Average rental per room (counting bathroom)54 per week
Average rental per room (not count- ing bathroom).....	.70 per week
Total number of houses.....	88
Total number of families.....	326
Total number of rooms.....	1150 (approximately)
Total number of rooms for living....	1146

Fore River Shipbuilding Company.—The Fore River Shipbuilding Corporation, Quincy, Massachusetts, is assisting its employees in securing their own homes. The following announcement which appears in their monthly magazine indicates the scope of their plan:

The company has had several conferences with real estate men in Quincy, Braintree, and Weymouth with reference to the supply of houses for the largely increased force which must be employed in order to complete the vessels which we have under contract, and on the 25th instant Mayor Whiton of Quincy held a public meeting in City Hall for the purpose of discussing this question.

They have signified their willingness to construct as many houses as it is possible to sell, and in order to determine what that number would be, the Company asks you to answer the enclosed list of questions if you care to do so.

Although it may not be generally known, it is possible for you to own your house and small lot of land upon the payment of a very nominal sum from \$100 up, and then by means of a co-operative bank mortgage and possibly a small second mortgage, to pay for your house in regular monthly installments, covering a period of twelve years, on terms which will make it possible for you to do this at a total payment not exceeding your present rent. At the end of twelve years you would own your house completely. If you should desire to sell or leave the employ of the company and move from the town, we have been told by these dealers, provided your house is kept in good repair, that they have never known an instance within the past ten years where the house could not be sold at an increased price over what the original cost was.

If you do not feel that you would want a single house, this same proposition could be carried out on a two-family house, you occupying one flat and the other, being rented, will probably carry more than half of the cost of the house to you, thereby making your payment a very nominal one.

The Fore River Company would not in any way be financially interested in your home, but offers to assist you in securing the necessary financial backing from bankers or individuals to make it possible for you to own a home if you desire.

Some builders will complete in every respect all of the details and forms connected with the complete transaction without charge in any way to the purchaser.

Houses will cost from \$2,500 to \$4,000, depending on the size of the house and the location. A \$2,500 house would have fire rooms and bath, and a \$3,500 to \$4,000 house would

have seven or eight rooms. This would include lot from 4,000 to 6,000 square feet. Double houses could be built from \$4,000 up.

If you have an idea of about the amount of money you think you would like to pay for a house, together with the actual amount you could pay down, and if you will fill in the blanks in the last question, the company will be pleased to give you figures showing exactly what it will cost you per month, and also advise you as to what kind of a house you could get for the price you have in mind. This service is absolutely free to you, and the company hopes that many of its workmen will take advantage of the opportunity of learning more about this matter.

If you will tell us how much you wish to pay for a house and how much you can pay down we will tell you how much it will cost per month, and you will own your home free and clear in twelve years.

CHAPTER XVII

EMPLOYMENT FORMS

Typical Forms.—For the busy manager, pressed to get results as quickly as possible, actual examples will make a surer appeal than long explanations of what should and should not be done in the organization of the labor force. The purpose of this final chapter is to give a picture of the real material used in various important business and industrial organizations. This material is made here available probably for the first time, and is published in the hope that it will prove of value as reference and suggestion. In the arrangement of the forms on the following pages, some attempt at sequence has been observed in the different steps, ranging through the various forms of application blanks, transfers of employees, changes of rates, and, finally, discharge. A variety of intermediate forms are also shown.

What the Candidate is Entitled to Know of the Job.—It will be seen in going through these forms, that the information gathered by them is almost entirely for the benefit of the employer. The applicant or employee also has the right to receive information about the job that will satisfy him that connection with the firm is desirable. The brief paper, "What the Candidate is Entitled to Know of the Job," pre-

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REVERSE OF FILENE APPLICATION BLANK

sented by O. G. Finkelstein before the Employment Advisers' Club, summarizes such information admirably and is well worth reproducing here. Following it, I am presenting the pension plan and house-selling plan of the Ludlow Manufacturing Associates, for such information is also of benefit to the candidate, and these plans possess exceptional merit.

Wages: In the table (given on page 401) you will note that I have put wages at the top of the list, as the first bit of information which each candidate applying for a job is entitled to know. I believe with Emerson, that "Every man is as lazy as he dares to be." I am also of the opinion that no one works from the mere love of working. Wages are of prime importance, either immediately or ultimately.

An apprentice is entitled to know the minimum wage which he will earn, and the maximum amount in the industry. All applicants are entitled to full information as to how much they can or will make in particular positions. My experience has taught me that in many instances employers have taken advantage of the workmen, and have not paid them an approximate standard of wages. We should not, therefore, be misjudging a candidate who seems to be over anxious in knowing the amount of wages.

Hours: Every candidate is entitled to know the number of hours expected of him. For many reasons this question is of great importance. In a large city, hours are important in relation to the distance of the candidate's residence. Health and family relations may enter into the same, and in many instances a candidate contemplates educational studies.

Duration: The probable duration of employment, whether of temporary or indeterminate character, are factors in every man's career. The waste of time in flitting from job to job,

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APPLICATION BLANK (FRONT AND REVERSE)—DENNISON MFG. CO.

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APPLICATION BLANK (INSIDE PAGES)—W. & A. BACON CO.

through no fault of their own, should be taken into consideration by every intelligent employer.

Health: With the exception of craftsmen and people with vocations, who, we assume, have learned the hygiene of their work, the other candidates, especially the apprentices, are entitled to know whether or not there is a danger of occupational disease, or whether the applicant is physically suited for the particular work.

Conditions: Every candidate should be told of the general conditions pertaining to the particular job. I find that there is a good deal of psychology in this connection. If you propose a greater number of duties and more onerous conditions than you will ordinarily expect of a candidate, he is more apt to be satisfied with his position than if you picture the work in glowing colors, with ideal conditions, and then have him find that it is not up to his expectations, although the position may be far better than any he has previously held. In engaging workers for our Bureau, I always impress upon them that they will have to perform a greater amount of duties than are ordinarily exacted.

Prospects: Help above the grade of common labor, office and mercantile help, and apprentices are surely entitled to know what opportunities there are in the work they are about to undertake. It is not the fault of a boy or girl, and in many cases of the adult, after spending several years at a given work to find it is a "blind alley" job, or the particular candidate finds no outlet for his ambitions.

Is the employer always fair, if he does not lay before the candidate the nature, standard, and character of the position, and personnel of the firm and its employees?

Time: The apprentice is entitled to know definitely how long it will take to learn the trade or vocation.

References: This point may seem unimportant, but I find that many firms insist upon hiring candidates with references,

THE B. F. GOODRICH COMPANY

APPLICATION BLANK

BRANCH
OR
DEPOT _____
No. _____

Any information given on this blank will be treated in a strictly confidential manner by this Company. It will be to the applicant's advantage to answer each question fully and accurately. The use of this blank does not indicate that there are any positions open, and does not in any way obligate this Company.

THIS APPLICATION IS SUBMITTED WITH THE UNDERSTANDING THAT A PHYSICAL EXAMINATION MUST BE PASSED BEFORE EMPLOYMENT CAN BE SECURED.

Date _____

Name of Applicant _____

Present Address _____ Telephone No. _____

Home Address _____

IDENTIFICATION AND PERSONAL FACTS.

Age _____ Antecedents _____ (English, Irish, German, etc.) Where Born _____

Single, Married or Widower? _____ Living with Wife? _____ How many children? _____

Other Dependents? _____ Do you own or rent house in which you live, or do you board? _____

Height _____ Weight _____ Sex _____ Physical Defects, if any _____

Is your health good? _____ Religious Denomination _____

EDUCATION

SCHOOL	Year Finished	Length of Time Attended	Attendance Confirmed or Interrupted	PROFICIENCY or DEGREE

REMARKS: _____

BUSINESS EXPERIENCE.

Have you hitherto given security? _____ Amount _____ Name and address of surety _____

Has your application for a bond ever been rejected and by whom? _____

Do you know of any reason why bond could not be furnished? _____

If so state reasons. _____

BUSINESS EXPERIENCE (Continued)						
EMPLOYER	EMPLOYER'S BUSINESS	LENGTH of SERVICE		KIND of WORK	SALARY RECEIVED	REASONS FOR LEAVING
		FROM	TO			
State Here Any Other Business Experience Not Included in Above						
REFERENCES						
NAME	ADDRESS	BUSINESS	State Whether Ref- erence is ex-Char- acter or Ability	STATE WHETHER RELATIVE		
With Whom Among Those Connected with The B. F. Goodrich Company, Are You Acquainted?			<div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"> </div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"> </div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"> </div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"> </div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"> </div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"> </div>			
Are you related by blood or marriage to any member of the Goodrich organization? If so give name.			<div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"> </div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"> </div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"> </div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"> </div>			

APPLICATION

CHECK LINE OF WORK FOR WHICH YOU ARE APPLYING:—

NOTE:—The following classifications represent the different lines of work embodied in our organization, and by checking of any one the applicant does not necessarily indicate his proficiency in that line. For instance checking "purchasing" would not of itself indicate that the applicant was applying for position of purchasing agent.

<input type="checkbox"/> SELLING	<input type="checkbox"/> CREDITS	<input type="checkbox"/> ADJUSTING
<input type="checkbox"/> BRANCH SERVICE	<input type="checkbox"/> FILING	<input type="checkbox"/> MECHANICAL ENGINEER
<input type="checkbox"/> AUDITING	<input type="checkbox"/> TIMEKEEPING	<input type="checkbox"/> INDUSTRIAL ENGINEER
<input type="checkbox"/> BOOKKEEPING	<input type="checkbox"/> PAY ROLL	<input type="checkbox"/> CHEMICAL LABORATORY
<input type="checkbox"/> STATISTICS	<input type="checkbox"/> PURCHASING	<input type="checkbox"/> TRAINING COURSE, RUBBER MFG.
<input type="checkbox"/> COST ESTIMATING	<input type="checkbox"/> RECEIVING	<input type="checkbox"/> DRAFTING
<input type="checkbox"/> CLERICAL	<input type="checkbox"/> STOCKKEEPING	<input type="checkbox"/> CALCULATING MACHINES
<input type="checkbox"/> STENOGRAPHY	<input type="checkbox"/> SHIPPING	<input type="checkbox"/>
<input type="checkbox"/> BILLING MACHINES	<input type="checkbox"/> INSPECTING	<input type="checkbox"/>
<input type="checkbox"/> MAILING	<input type="checkbox"/> COLLECTIONS	<input type="checkbox"/>

State fully what you believe to be your proficiency in and your qualifications for the line of work indicated above.

SALARY WANTED _____

TO BE FILLED IN BY A REPRESENTATIVE OF THE B. F. GOODRICH COMPANY.

INTERVIEWED BY _____ DATE _____

REMARKS _____

SIGNED _____

THIRD PAGE OF GOODRICH APPLICATION BLANK

and many other firms just as strictly adopt a policy of refusing to give references. The worker is then between the devil and the deep sea. While some instances may arise of a person abusing or misusing a reference letter, the exception is no excuse for not ordinarily giving exact and detailed references. We have no right to hinder the candidate in the future, and he should, therefore, be informed whether or not you will furnish references upon his leaving his employment.

Fair Play: In the vernacular of the street, the candidate is entitled to fifty-fifty; in other words, play fair with him and give him at least an even break. I know there are many business reasons which cannot be disclosed to the candidate, but bearing in mind that you demand from the candidate a full personal and domestic history, birth, religion, nationality, character, habits, former employment and what not, he surely is entitled to some consideration.

Expenses: Every candidate is entitled to know whether there are any expenditures in connection with the work, and who is expected to stand the same, and whether or not he will be charged for any damage, loss or breakage. These matters can happen quite frequently in our complex industry, and are causes for unrest and quitting of jobs.

Discharge or Lay off: As far as consistent, we should give reasonable notice to the employee before his termination of employment. Employers feel very much hurt when some one leaves them without a moment's notice, many times causing thereby a financial loss, but do not take into consideration that a similar treatment to the employee works just as much hardship, and frequently a greater calamity, to him and his family. While men are discharged or laid off for good causes, the employer does not take the employee into his confidence, but mechanically hands him his "time." This treatment sours the worker. The whole matter should be "give and take." We should be fair with each other.

WHAT THE CANDIDATE IS ENTITLED TO KNOW OF THE JOB					
	Common Labor	Skilled Trades	Unskilled Help	Vocations	Apprentice
Wages.....	yes	yes	yes	yes	yes
Minimum.....	yes	yes	yes	yes	yes
Maximum.....	yes	yes	yes	yes	yes
Average.....	yes	yes	yes	yes	yes
Pay Day.....	yes	yes	yes	yes	yes
Hours.....	yes	yes	yes	yes	yes
Duration.....	yes	yes	yes	yes	yes
Health.....	yes		yes		yes
Conditions.....	yes	yes	yes	yes	yes
Prospects.....			yes	yes	yes
Promotions.....			yes	yes	yes
Opportunity.....			yes	yes	yes
Personnel.....			yes	yes	yes
Time.....					yes
References.....	yes	yes	yes	yes	yes
50-50.....	yes	yes	yes	yes	yes
Expenses.....	yes	yes	yes	yes	yes
Charges.....	yes	yes	yes	yes	yes
Discharge (Reasons)...	yes	yes	yes	yes	yes
Discharge (Notice)....					

Plan of Pensions for the Employees of the Ludlow Manufacturing Associates.—

On November 26, 1913, the Board of Trustees of the Ludlow Manufacturing Associates adopted the following plan of pensions for such of their employees who have, by long and faithful service, earned an honorable retirement. The Trustees adopted this Pension Plan in order to show their appreciation of, and as a reward for, faithful, loyal, and efficient service.

WALWORTH MANUFACTURING COMPANY

APPLICATION FOR EMPLOYMENT

Wrote to _____

Wrote to _____

Date _____

Date _____

Application No. _____

(Applicant must not write above this line)

Name of applicant in full _____

Present address _____

Permanent address _____

What kind of work do you apply for? _____

Give below a statement of the latest places where you have worked, down to the present time:

Name of Employer	Address of Employer	What work did you do?	When did you enter their service?	When did you leave their service?

If your last previous position was with a large corporation, give your foreman's name and your clock number:

Foreman's name _____ Your clock number _____

Why did you leave your last place? _____

Have you served your time at a trade? _____ What trade? _____

When? _____ Where? _____

How long have you worked on the kind of work applied for? _____

How old were you your last birthday? _____ Give date of birth _____

Where were you born? _____

Are you married or single? _____

Naturalization _____

Were you ever employed by this Company before? _____

If so, in what department? _____ When? _____

On what kind of work? _____

What foreman did you work under? _____

Have you any relations working for this company? _____

If so, who? _____

In what department do they work? _____

Date _____

APPLICATION BLANK—WALWORTH MFG. CO.

Pension Board.

1. A Pension Board, consisting of the President, Treasurer, Mill Agent and General Superintendent, shall control the payment of pension allowances.
2. A majority of the Pension Board shall constitute a quorum for all purposes, and no pension shall be granted until approved by a majority of the Board.
3. Pensions granted prior to the adoption of this plan shall not be affected by its adoption, and all pensions granted shall be reported to the Board of Trustees at the first meeting in the month following same.

Eligibility.

The Pension Board may authorize the payment of a pension to any retired employee, on the following basis:

1. All employees of the Associates shall be eligible to pensions as hereinafter stated.
2. All male employees who shall have reached the age of 65 years and have been twenty or more years in the

EMPLOYEES RECORD									
Name				Check No.					
Address									
Date Employed			Dept.			Locker No.			
Position									
Nationality			Age			Married			
Where Last Employed									
Employed by this Co. before			When			What Dept.			
Rate per hour			Rate per week						
Change of Rate {	Rate				Date Quit				
	Date				Cause				
Remarks									

EMPLOYEE'S RECORD—NEW ENGLAND CONFECTIONERY CO.

LABOR AND COMPENSATION

EDUCATIONAL REPORT OF EMPLOYEE	FIRST NAME	INITIAL	LAST NAME	NUMBER
THE ABOVE NAMED REPORTS THAT HE IS TAKING THE FOLLOWING COURSES OF INSTRUCTION:				DATE OF REPORT
NAME OF INSTITUTE		SUBJECTS		
NAME OF INSTRUCTOR			PROBABLE DATE OF COMPLETION	DATE COMPLETED
HAVE YOU RECEIVED A DIPLOMA, CERTIFICATE OR OTHER EVIDENCE OF ACCOMPLISHMENT		ANY SPECIAL DATA RESPECTING LECTURES		
ADDITIONAL INFORMATION				
FOR WHAT KIND OF WORK, POSITION OR ADVANCEMENT ARE YOU PREPARING				
INVESTIGATED AND APPROVED			SIGNED	
<small>IF ANYTHING SHOULD OCCUR TO PREVENT OR HINDER YOUR CONTINUANCE WITH YOUR EDUCATIONAL WORK THE FACTS SHOULD BE REPORTED IN WRITING. THESE REPORTS WILL BE INVESTIGATED AND THEY WILL HAVE DIRECT BEARING ON PROMOTIONS. IF COURSE HAS NOT BEEN COMPLETED ANOTHER REPORT SHOULD BE MADE UPON ITS COMPLETION.</small>				

EDUCATIONAL REPORT OF EMPLOYEE—L. BAMBERGER & CO.

RECORD OF INTERVIEW	FIRST NAME	INITIAL	LAST NAME	NUMBER
POSITION OR KIND OF WORK				
ADDRESS		STREET	CITY OR TOWN	STATE
TELEPHONE	AGE	APPLICATION BLANK ON FILE	LEARNED OF POSITION THROUGH FRIEND ADVERTISEMENT AGENCY	
SPECIFIC TRAINING FOR POSITION		MANNERS	INITIATIVE	
GENERAL TRAINING		DRESS	COMRADERY	
EXPERIENCE IN LIKE POSITION		FEATURES	LEADERSHIP	
GENERAL EXPERIENCE		CONVERSATION	STABILITY	
WILLINGNESS TO WORK		CONCENTRATION	SOBRIETY	
WILLINGNESS TO IMPROVE		AMBITION	PHYSICAL CONDITION	
		ENERGY	DISTINCTIVE FEATURES OR CHARACTERISTICS	
DATE OF INTERVIEW	DESIRED		INTERVIEWED BY	
	YES	DOUBT	NO	

RECORD OF INTERVIEW—L. BAMBERGER & CO.

- service, may at their own request, or at the discretion of the Pension Board, be retired from active service, and become eligible to a pension.
3. All male employees who have been twenty or more years in the service, shall be retired at the age of 75 years unless the Pension Board shall fix some later date for such retirement. Persons occupying executive positions are exempt from the maximum age limit.
 4. All female employees who shall have reached the age of 55 years, and have been twenty or more years in the service, may, at their own request or at the discretion of the Pension Board, be retired from active service and become eligible to a pension.
 5. All female employees who have been twenty or more years in the service, shall be retired at the age of 65 years unless the Pension Board shall fix some later date for such retirement.

Norton Companies Worcester, Mass. Employee's History		
Name _____	Address _____	Clock # _____
Date of Employment _____		
Date of Preceding Report _____		
Principal Work done since then _____		
Adapted to Work _____	_____	_____
Sufficiently Trained _____	_____	_____
Attitude Toward Work _____	_____	_____
Capable of Filling Better Position _____	_____	_____
Special Aptitude _____	_____	_____
Promptness _____	_____	_____
Accuracy _____	_____	_____
Capacity for Team Work _____	_____	_____
Foreman _____ Emp. Div _____		

EMPLOYEE'S HISTORY—NORTON COMPANIES

LABOR AND COMPENSATION

Norton Companies Worcester, Mass.
Employment Record

Name of Applicant _____ Date _____
 Address _____ Clerk # _____
 NEAREST TELEPHONE (Name & Number) _____
 Rate of Pay Wanted _____
 Where Born _____ Birthplace of Father _____
 Date of Birth _____ Birthplace of Mother _____
 Married? _____ Number Dependents for Support _____
 Did you go to Common School? _____ High School? _____
 College or Tech? _____
 Name of last school attended _____ Did you graduate? _____
 What course did you take? _____
 What trade? _____ Where learned? _____
 Previous Employment (Last 3 jobs)

Firm	Kind of Work	From	To	Reason for Leaving

References (Give 3 names preferably of those working here.) _____

Height _____ Weight _____
 Eyes _____ Complexion _____

COVER

EMPLOYMENT RECORD—NORTON COMPANIES

Interviewer's Impressions as to:

Willingness to Work _____
 Knowledge of Work _____
 Probable Activity _____
 Probable Initiative _____
 Probable Loyalty _____
 Courtesy _____
 Self-reliance _____
 Decent or Keenly _____
 Willingness to Improve _____
 Stability _____
 (Signed by) _____ Date _____

REVERSE OF EMPLOYMENT RECORD—NORTON COMPANIES

In special cases of incapacity, in which the term of service has been less than twenty years, but at least ten years, the Pension Board may, at its discretion, authorize the payment of a pension and the amount of the same, but not to exceed in any case \$1,000 per year. A physical examination by a surgeon, approved by the Board of Pensions, will be required of employees who wish to be retired on a pension allowance because of incapacity.

Definition.

The terms "service" and "in the service" apply to all employees of the Ludlow Manufacturing Associates, who have received a stated and regular compensation from either the Ludlow Manufacturing Associates, Ludlow Manufacturing Company, or the Boston Flax Mills.

Absence and Leaving Service.

1. A temporary lay-off on account of illness or reduction of force will not be considered as a break in the continuity of service, but, when such absence exceeds six consecutive months, it shall be deducted in computing the length of active service.
2. If a person, after leaving the service for more than one year, shall be re-employed, he shall be considered, in relation to the Pension System, as a new employee.

Pension Allowances and Conditions.

1. The sums which the Board of Pensions may authorize to be paid to employees retired at the age limit, shall be as follows:
 - a. For each year of active service an allowance of 1 per cent of the average annual pay during the two years next preceding retirement.
 - b. No pensions shall exceed \$84.00 per month or be less than \$15.00 per month.
2. Pension allowances shall be paid monthly from the date of retirement until the death of the employee. At the

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29																																				
<p> Nativity _____ Nativity of Parents _____ 1. U. S. Citizen _____ 2. Married _____ 3. Widower _____ ed _____ 4. No. of Children _____ 5. No Other Dependents _____ No. Rec. of U. S. _____ 6. Speaks _____ Date of Birth _____ Union _____ 7. Re-employed? _____ Wages Wanted _____ Religious Denomination 8. 9 _____ 10. Relatives Employed Here _____ Name _____ Relation _____ Department _____ 11. Notify in Case of Emergency _____ Name _____ Address _____ 12. Member of { Naval Militia _____ National Guard _____ Date Enlisted _____ 13. Member of Military or Naval Reserve. _____ Company, etc. _____ Height _____ Weight _____ Signature _____ </p>																																																																
<table border="1"> <thead> <tr> <th>Type</th> <th>Eyes</th> <th>Hearing</th> <th>Arms</th> <th>Hands</th> <th>Fingers</th> <th>Legs</th> <th>Feet</th> <th>Teeth</th> </tr> </thead> <tbody> <tr> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> </tbody> </table> <p> Forecast _____ _____ _____ Followed up _____ </p>																													Type	Eyes	Hearing	Arms	Hands	Fingers	Legs	Feet	Teeth	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
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[illegible]

RECORD OF EMPLOYEE (FRONT AND REVERSE)—EDISON COMPANIES

409

EMPLOYEE'S RECORD—WALWORTH MFG. CO.

REMARKS

REVERSE OF EMPLOYEE'S RECORD

discretion of the Pension Board, however, pension allowances may be paid weekly.

3. Pension allowances shall be non-assignable, and an attempted transfer or pledge of the same shall not be recognized by the Pension Board, and may, at its discretion, work a forfeiture thereof.
4. Neither the granting of a pension nor any other action taken by the Pension Board or by the officers of the Associates shall be held or construed as creating a contract or giving to any officer, agent, or employee a right to be retired in the service or any right to any pension allowance; and the Associates expressly reserve the right to discharge without liability, other than for salaries or wages due and unpaid, any employee whenever the interests of the Associates may, in their judgment, so require.
5. Pension allowances may be suspended or terminated by the Pension Board in cases of gross misconduct or of any violation of the rules.
6. The acceptance of a pension will not debar any retired employee from engaging in any other business which, in the judgment of the Pension Board, is not prejudicial to the interests of the Associates, but he cannot re-enter service.

Method of Computing Pensions.


The amount of any pension granted on account of long service will depend on two conditions—the number of years the person has served the Associates, and the amount of his or her average wages per year for the two years next preceding retirement.

For example, if the average pay per year for the last two years of active service equals \$500.00, and if the service has been continuous for thirty years, the pension will be 30 per cent of \$500.00, or \$150.00 per year. This would equal \$12.50

EMPLOYMENT FORMS

411

NEW YORK <small>30 NASSAU ST.</small>	PARIS <small>20 Rue de Valenciennes</small>	VIENNA <small>Grassestrasse 9</small>	BERLIN <small>71 Lindenstrasse</small>	CHENNAI <small>45 Landstrasse</small>	YOKOHAMA <small>60 Yamaguchi Cho</small>
--	--	--	---	--	---



Wm. Filene's Sons Company
WASHINGTON, SUMNER, AND HANLEY STREETS
Boston

_____ 101

Dear _____

_____ has applied to us
 for a position as _____ and refers us to you. Will
 you kindly write us how long you have known the applicant and in
 what relation, and if you consider him _____ honest and of good
 habits. We should like also to have you give us the names and
 addresses of any persons for whom the applicant has worked, as
 this will enable us to judge the applicant to better advantage.

Thanking you in advance for your courtesy and assuring
 you that your reply will be treated as strictly confidential,
 we remain

Yours very truly,

WM. FILENE'S SONS CO.


Per _____

Remarks _____

Signed _____

CHARACTER LETTER—WM. FILENE'S SONS CO.

NEW YORK 66-68 HUNTER ST.	PARIS 25 Rue d'Hauteville	VIENNA Bergstrasse 9	BERLIN 71 Lindenstrasse	CHEMNITZ 48 Lindenstrasse	YOKOHAMA 26 Yamashita Cho
------------------------------	------------------------------	-------------------------	----------------------------	------------------------------	------------------------------



Wm. Filene's Sons Company
WASHINGTON, BUNNEN AND HANLEY, STREETS
Boston

191

Dear _____

_____ has applied to us for a position, giving your name as that of a former employer. It is necessary for us to verify the applicant's personal character and record of time. We shall appreciate, therefore, an answer to the questions below at your earliest convenience, and assure you that your reply will be held strictly confidential, and that we shall be glad to reciprocate at any time.

WM. FILENE'S SONS CO.

Per _____

Data regarding employment with you.

Department _____

Worked under _____

Entered your employ? _____	Habits good while in your employ? _____
Left your employ? _____	Strictly honest in every way? _____
Position filled? _____	_____
Discharge or resigned and why? _____	Name other places where applicant has worked? _____
_____	_____
Work satisfactory? _____	_____
_____	_____

Additional Remarks: _____

Signed _____

PREVIOUS EMPLOYMENT RECORD—WM. FILENE'S SONS CO.

EMPLOYMENT FORMS

413

WM. FILENE'S SONS CO., 443 to 463 Washington St. BOSTON		_____19____
Principal of _____		
Dear _____		
M _____ of _____ has applied to us for a position stating that he attended your school in _____ Will you kindly answer the questions on the other side concerning him and also give us any other information that may be of value to us. Thanking you in advance for your courtesy and assuring you that your reply will be held strictly confidential, we beg to remain,		
Yours very truly, WM. FILENE'S SONS CO. Per _____		

General Health.....
Personal Character.....
Home Influence.....
Associates.....
Rank in Scholarship.....
Best Branches.....
Inclination for any Special Line.....
Did he Graduate?.....
Time of Leaving or Graduation.....
Additional Information.....
Signed.....

DETAIL OF JOB—DENNISON MANUFACTURING CO.			
Job No. _____	Grade _____	Occupation _____	
Duties.....			
Time required to Learn Job.....		Previous training or Experience.....	
Starting Wage _____	Next Advance _____	Wage Limit _____	
Age _____	Height _____	Weight _____	Posture _____
Motion _____	Hands _____	Eyesight _____	
Schooling Desired _____	Overtime Lay-offs _____		

ABOVE: REFERENCE LETTERS—WM. FILENE'S SONS
 BELOW: DETAIL OF JOB—DENNISON MFG. CO.

REQUISITION FOR HELP

Always use this form when in need of help and whenever possible notify Employment Department one week ahead.

Employment Dept. : _____

191

Please employ for Dept. _____ one _____ age _____ to _____

with the following qualities _____

Kind of work wanted for _____

Wages to start _____

Chances of advancement _____

Steady or temporary work _____

When needed _____

Signature _____

Dept. _____

**REQUISITION TO EMPLOYMENT DEPARTMENT FOR HELP—
DENNISON MFG. CO.**

NEW EMPLOYEE SLIP

This slip is to be sent to Asst. Dept. for record, by department head, as soon as new employee is placed at work.

M _____

Address _____

Date of Birth _____

Married or
Single _____

Starting
Wage _____

Check
No. _____

Is to begin work on _____

in Dept. _____

in the position referred to on back.

Employment Department _____

Per _____

Began work _____

191 _____

Dept.
Head _____

If transferred from another dept. or if employee
worked here before state below : _____

Dir.
Supt. _____

**NEW EMPLOYEE SLIP (REVERSE OF "REQUISITION FOR HELP")—
DENNISON MFG. CO.**

EMPLOYMENT FORMS

415

AUTHORIZATION OF EMPLOYMENT		First Name	Initial	Last Name	Number
The above Named has been employed for Dept. Room					To Date from
Kind of Work					Rate of Wages
New Employee		Re-Employed		Former Employment	
Experienced	Learner	Laborer	Experienced	Learner	Laborer
Signed _____					
Date _____					
EMPLOYMENT DEPARTMENT					
The above Named reported for Work		Date		Hour	
Date of this Report		Signed _____		Date _____	
				SUPERINTENDENT FOREMAN	
The Payroll Department acknowledges Receipt of this Record					
Signed _____					
Date of this Report _____					
PAYROLL DEPARTMENT					
DUPLICATE					

3 ENCL.

ORIGINAL

INCREASE ORDER

NAME.....NO.....

DEPT.....POSITION.....

CLASSIFICATION NO.....

INCREASE WEEKLY SALARY FROM \$.....TO \$.....

TO BEGIN

EMPLOYMENT SIGNATURE.....

APPROVED

STORE MANAGER

AUTHORIZATION OF EMPLOYMENT BLANKS
 Above: L. Bamberger & Co. Below: Wm. Filene's Sons

REQUEST FOR PRIVATE PAY ROLL EMPLOYEE				PERSONNEL SERVICE DEPT No. _____
DEPARTMENT _____				DIVISION _____ 19__
PERSONNEL SERVICE DEPARTMENT Please furnish the following:				VOID AFTER _____ 19__
Number	Kind	Rate	Pay	Position, Duties, Hours, Etc.

REPLACING _____ Returned ☐
 INCREASE IN FORCE—ACCOUNT _____ Promoted ☐
 (to Check Here)

TO START WORK _____ 19__

If promotion is made from the
 Force Account, the
 Department will be necessary.

DESIRED QUALIFICATIONS:
 AGE _____ and _____ EDUCATION _____

EXPERIENCE _____

OTHER POINTS _____

Approved _____	Approved _____	Signed _____
----------------	----------------	--------------

TO BE APPROVED, WHEN INCREASE IN FORCE OR INCREASE IN PAY ROLL RESULTS, BY THE PRESIDENT AND FINANCIAL SUPERVISOR OF THE LIBRARY SERVICE,
 OR BY CHAIRMAN OF BOARD OF DIRECTORS OR BY PRESIDENT AND SBN OF PERSONNEL SERVICE DEPARTMENT ONLY AFTER SUCH APPROVAL HAS BEEN SECURED.

REQUEST FOR PRIVATE PAYROLL EMPLOYEE—EDISON COMPANIES

[illegible]

REQUEST FOR SHOP EMPLOYEE—EDISON COMPANIES

per month, but, as the minimum pension has been fixed at \$15.00 per month, there will be added to the regular pension \$2.50, making the minimum of \$15.00.

If, in another case, the average pay per year for the last two years has equalled \$2,000.00, and the service has been continuous for forty years, the pension would equal 40 per cent of \$2,000.00, or \$800.00 a year.

How to Secure a Pension.

An employee of the Ludlow Manufacturing Associates who wishes to apply for a pension should take up the matter either with the head of the department in which he or she is working, or with a member of the Pension Board. A form similar to the following will then be furnished to the applicant, to be filled out and signed by them. The answers to the questions on the application blank should be answered accurately and with care. The application should then be sent to a member of the Pension Board.

APPLICATION FOR PENSION

Name of Applicant.....
Address
Date of Birth.....
Place of Birth.....
Are you married?.....
Names and Ages of all Children.....
.....
Names and Ages of all Persons dependent on you for support
.....
Date of entering the service of the Ludlow Manufacturing
Associates, or predecessors.....
Have you, since entering the service, been absent for more
than six consecutive months? If so, give dates of all such
absences
.....
Signed.....

INTRODUCTION

To MP _____ DATE _____

Introducing individual named below for temporary position mentioned.

If applicant is satisfactory insert only the date effective and return to Personnel Service Department with signatures as follows:

OF DIVISION MANAGER—When employee is carried on private pay roll.

OF FOREMAN—in other cases.

Insert check number at time of acceptance for all employees not carried on private pay roll.

If applicant is not satisfactory show reason, sign opposite No. 1 and return to Personnel Service Department in envelope at once.

PERSONNEL SERVICE DEPARTMENT

By _____

REJECTION NOTICE. APPLICANT IS NOT SATISFACTORY

REASON _____

1 _____

NOTICE OF

CHECK NO. _____ NAME _____

ADDRESS _____

DATE EFFECTIVE _____ RATE _____ PER _____

DEPARTMENT _____

DIVISION _____

POSITION _____

PERSONNEL SERVICE DEPT. NO. _____ DEPT. NO. _____

A. APPROVED	B. AUTHORIZED	C. CHECKED
-------------	---------------	------------

PERSONNEL SERVICE DEPT. DIVISION MANAGER OR FOREMAN

INTRODUCTION BLANK—EDISON COMPANIES

EMPLOYMENT FORMS

419

Name _____ Pass to Dept. No. _____ Date _____ Locker No. _____ Supt. _____ Doctor's Exam. _____

**PASS TICKET OF ACCEPTED APPLICANT—NEW ENGLAND
CONFECTIONERY CO.**

WALWORTH MFG. CO.		RATE CARD		Form F-81 2000-1-34
Name _____		Clock No. _____		Dept. _____
Occupation _____		Date of this card _____		191 _____
PROPOSED RATE FOR NEW EMPLOYEE				
*If previously employed by us, he quit on _____ 191 _____, he being then employed in Dept. _____ at the rate of _____ his occupation being _____				
PROPOSED NEW RATE FOR PRESENT EMPLOYEE				
*Present rate is _____		Dating from _____ 191 _____		Dept. _____
*Last previous rate was _____		Dating from _____ 191 _____		Dept. _____
Items marked (*) have been filled in by the Cost Department. Cost Dept. per _____ Date _____		The proposed rate is to take effect from _____ 191 _____ Signed _____ Foreman		
Entered on Employee's Record Card. Cost Dept. per _____ Date _____		Approved _____ Superintendent Approved _____ Works Manager		
Foreman will state on the other side the reason for proposed change.				

RATE CARD—WALWORTH MFG. CO.

LABOR AND COMPENSATION

RATING OF EMPLOYEE		FIRST NAME	INITIAL	LAST NAME	NUMBER		
DATE	EMPLOYED AT		KIND OF WORK				
WAGES		PROFITABLE OR TRANSFERABLE TO WHAT OTHER KIND OF WORK					
\$	CY.	PER					
CHARACTER OF SERVICE	SUPERIOR	EXCELLENT	GOOD	FAIR	UNSATISFACTORY	REMARKS	
	NO	INDETERMINATE					
	WORKMANSHIP						NO
	PRODUCTION						SOME
	ATTITUDE TOWARDS WORK						MUCH
ATTITUDE TOWARDS ONE.							
ATTENDANCE & PUNCTUALITY							
APPROVED					RATED BY		
Signature					Signature		

RATING OF EMPLOYEE—L. BAMBERGER & CO.

Recommendation for increase in pay		
Name	Age	
Present position	Dept.	No.
New Rate	Per week	Per hour
Present Rate	Last increase	Date
Increase to date from		
Reasons for recommending increase		
Approved	Foreman	
		Supt.

INCREASE IN PAY—NEW ENGLAND CONFECTIONERY CO.

SALE OF HOUSES TO EMPLOYEES OF THE LUDLOW MANUFACTURING ASSOCIATES

During the past thirty years the number of persons employed by the Ludlow Manufacturing Associates has increased from 650 to 3,000. To provide homes for this large additional number of employees and their families, it has been necessary for the Associates to build several hundred houses. These houses have not been built because of any desire on the part of the Associates to own and rent houses to their employees, but because other persons could not be found who would invest their money in this class of property in Ludlow.

A large proportion of the houses have been detached, one or two family cottages each standing on its own lot of about 50 feet by 100 feet. The Associates have endeavored to provide comfortable and economically arranged homes for their employees, and particular consideration has been given in designing to the convenience of the housekeeper. Most of the houses are provided with furnace and electric light or gas and are equipped with modern plumbing. An endeavor has been made in the arrangement of the houses and grounds around them to make Ludlow an attractive and pleasant place to live in.

In the belief that it is desirable that their employees should own their own homes, the Associates in 1910 adopted the policy of selling houses and lots to persons in their employ. The plan adopted at that time proved successful, and in 1916 it was extended so as to make it as easy as possible for any employee of the Associates to buy his own home. It is a hope of the Associates that by acquiring ownership of their own homes and thus having a stake in the village their employees will become better citizens and more useful employees.

Plan of Selling Houses and Lots.

The plan of selling houses and lots adopted in April, 1916,

RE-RATING REQUISITION—L. BAMBERGER CO.

REVERSE OF RE-RATING REQUISITION—L. BAMBERGER CO.

EMPLOYMENT FORMS

423

Check No. _____	
Change the pay of _____	
From _____ per Week Hour	To _____ per Week Hour
Beginning _____ 191 _____	Dept. _____
Occupation _____	Age _____
Date of last change _____	Length of Service _____
Reason for Change _____	
Recommended by _____	
Div. Supt. _____	Approved _____

AUTHORIZATION OF PROMOTION, TRANSFER OR CHANGE OF RATE		INITIAL	LAST NAME	REMARKS
The action results are given (Promotion—Transfer—Change in Rate) as			TO DATE FROM	
DATE			DATE OF ORDER	
EMPLOYMENT (Promotion—Transfer—Change) FROM			FOR PROMOTION, TRANSFER	FOR PROMOTION, TRANSFER
DATE			DATE	DATE
THE ACTION TAKEN				
REPORTED FOR WORK	DATE	REASON EMPLOYMENT	DATE	REASON
NAME OF	NAME	NAME	NAME	NAME
DATE OF	DATE	DATE	DATE	DATE
THE PERSONNEL DEPARTMENT APPROVED REPORT OF THIS ACTION				
NAME OF	NAME	NAME	NAME	NAME
DATE OF	DATE	DATE	DATE	DATE
DUPLICATE				

CHANGE OF RATE FORMS

Above: Dennison Mfg. Co. Below: L. Bamberger & Co.

SEMI-ANNUAL SALARY CHANGES								
DEPT. _____				DATE _____				
<p>Following is a list of employees who report to you at this date. Please note carefully the instructions regarding changes in salary, and recommend such changes as you consider justified. This list must be sent to the Head of your Dept. by _____</p> <p>INSTRUCTIONS.—Changes in rate of pay will be made (a) on the basis of the kind of work employee is doing and his efficiency in that work; (b) on punctuality and regularity in attendance; (c) length of service in the employ of the company. (d) length of time since last increase.</p> <p>Any employee recently transferred from another department should be considered by both the head of the department which he has left and the head of the department to which he has been transferred before final recommendation is made.</p> <p>Your recommendation requires the final approval of the Store Manager before it becomes effective. You are, therefore, made no guarantee, to prevent your subordinates any increase you may recommend.</p> <p>Your expense for the first week is _____ last year was _____</p>								
NAME	POSITION OR WORK	With Company Since	Initial Salary	Date of Last Change	Previous Rate	Proposed Rate	Rate Recommended	a Note to Explain
TOTAL								
<p>I recommend the above changes _____</p> <p style="text-align: right;"><i>Head of Dept.</i></p> <p>Approved _____ Authorized _____</p> <p style="text-align: center;"><i>Head of Payroll</i> <i>Store Manager</i></p>								

SALARY CHANGES—WM. FOLENE'S SONS

provides for the sale of practically all of the houses in the village owned by the Associates at the cost or at less than the cost of the construction of the houses themselves. The terms of the sale allow an employee of the Associates to buy a house and lot on the payment of \$100 in cash, the balance being paid in small monthly instalments over a period extending to eight years.

From the selling prices at which the houses of the Associates are held for sale, the following discounts are allowed:

2% discount on selling price for dealing direct with the Associates.

10% discount for all cash paid in excess of \$100 above the amount obtainable from the savings bank on first mortgage loan.

Discount from selling price to cover repairs, if any are needed, in order to put the house in first-class condition.

The Associates assist the purchaser in obtaining a first mortgage savings bank loan and they themselves take a sec-

425

TRANSFER RECORD—NORTON COMPANIES

TRANSFER RECORD—NEW ENGLAND CONFECTIONERY CO.

NOTICE OF TRANSFER			
Name _____			
Address _____			
Date Effective _____		Rate _____ Per _____	
OFF Check No. _____ _____ <div style="text-align: center; font-size: small;">DEPARTMENT</div> _____ <div style="text-align: center; font-size: small;">DIVISION</div> _____		ON Check No. _____ _____ <div style="text-align: center; font-size: small;">DEPARTMENT</div> _____ <div style="text-align: center; font-size: small;">DIVISION</div> _____ <div style="text-align: center; font-size: small;">OPERATION</div> _____ <div style="text-align: center; font-size: small;">PERSONNEL SERVICE DEPT.</div>	

TRANSFER NOTICE—EDISON COMPANIES

ond mortgage on the balance, after deducting the cash payment together with the various allowances referred to above if applicable to the sale.

Example.

Assuming that the prospective purchaser deals direct with the Associates and makes a first cash payment of \$200:

Selling price, say.....	\$1,900.00
2% Allowance for dealing direct with the Associates.....	\$38.00
10% Allowance on cash paid above \$100	10.00
Estimated cost of repairs, say.....	27.00
	75.00
Net selling price.....	\$1,825.00
Amount of cash paid.....	\$200.00
Amount of first mortgage loan, say.	1,200.00
	1,400.00
Balance of price due.....	\$425.00
which the Associates will take as second mortgage.	

RECORD OF SUGGESTION	
Name _____	
Dept. _____	Date _____
Suggestion _____	

SUGGESTION BLANK—DENNISON MFG. CO.

Customer's Name _____	Dept. _____
DESCRIPTION OF ERROR OR COMPLAINT	

Order No. _____	
Date _____	Cost \$ _____
THIS FORM MUST BE SIGNED BY EACH OF FOLLOWING PERSONS	
DEPT. HEAD _____	EMPLOYEE RESPONSIBLE FOR ABOVE _____
DIV. SUPT. _____	FOREMAN _____

COMPLAINT BLANK—DENNISON MFG. CO.

35m. 1-31-16.

R. D. Form 80.

Baltimore and Ohio Railroad Co.**RELIEF DEPARTMENT.****NOTICE TO MEMBERS.****SAFETY FIRST**

When your application for membership has been accepted a Book of Regulations containing certificate will be sent to

.....
(Name and rank)
to whom you should apply for it. When you receive it read the rules carefully.

When you are sick or injured notify at once the officer under whom you are employed, giving the date disability began and exactly where you live. If not able to personally notify him, send a letter or postal card. Benefits will be paid only from the date of such notice. (See Regulation No. 36.)

If the Medical Examiner does not call within a week, send for or call on him, if you are able. You are expected, when able, to visit his office as often as he may require, payment of benefits being dependent on his report. He is not expected to call on you if you are able to go to his office, or meet him at station.

Do not change your residence during disability without notifying the Medical Examiner, or leave his district without his consent, otherwise you forfeit your right to receive benefits. (See Regulation No. 50.)

In case of injury the Company's Surgeon must be called. If any other Surgeon is employed the Department will not be responsible for his bill. A list of Company's Surgeons is printed on the Time Schedule, copy of which is in the hands of every official.

Preserve this card and follow these instructions carefully to prevent delay in payment of claims.

The Medical Examiner is

Dr.
and his office hours are as follows:

.....

.....

S. R. BARR,

Superintendent.

(over)

DISABILITY NOTICE—BALTIMORE AND OHIO R. R.

The reverse contains "Safety First" precautions

[illegible]

RETURN OF EMPLOYEE TO PERSONNEL DEPARTMENT— EDISON COMPANIES

Monthly payments are then required of sufficient amount to apply as follows:

1. Pay the interest on the first mortgage.
2. Pay the interest on the second mortgage.
3. Pay the amount of the second mortgage in eight years or less.

Assuming that the purchaser could pay \$12.50 a month, the amounts paid on the above sale would be applied as follows, thereby paying off the second mortgage in five years and nine months.

	Int. on 1st Mortgage	Int. on 2d Mortgage	To apply on 2d Mortgage
1st year	\$60.00	\$21.25	\$68.75
2d “	60.00	17.80	72.20
3d “	60.00	14.20	75.80
4th “	60.00	10.40	79.60
5th “	60.00	6.40	83.60
6th “	60.00	2.25	45.05

LABOR AND COMPENSATION

NORTON COMPANIES, WORCHESTER, MASS.	
REPORT ON EMPLOYEE _____ 191	
Name _____	Clock No. _____
Assigned to this department _____ 191	
Is unsatisfactory in the following particulars Intends to leave for the following reasons Must be laid off for lack of work Has been out over (3) three days without notifying us. _____	
_____ transferred I recommend that he be dismissed	
In my opinion he is fitted for work as _____ _____	
_____ Dept.	
_____ Foreman	
OVER	

REPORT ON EMPLOYEE—NORTON COMPANIES

Amount Due.	Approved for
\$ _____ Week Ending _____ 191	Payment _____
\$ _____ Week Ending _____ 191	
Disposition of the case _____ _____ _____ _____	
_____ 191 Employment Division	
Noted _____ Health & Sanitation Department	

REVERSE OF ABOVE FORM, SHOWING DISPOSITION OF CASE

EMPLOYMENT FORMS

431

SPECIAL REPORT	First Name	Initial	Last Name	Number	
The Above Named Employee deserves COMMENDATION as Follows: REPROOF					
Occasion:					Date
Circumstances:					
Comment:					
Is the Above Report Based on	Suspicion	Hearsay	Personal Knowledge	Has Employee been shown this Report ?	Additional Details may be written on Reverse Side of this Sheet
Investigated and Approved			Signed		
_____ Signature			_____ Signature		

SPECIAL REPORT ON EMPLOYEE—L. BAMBERGER & CO.

At the time of the sale, the purchaser receives a good and valid deed, the only restrictions being the building line to be conformed to and the permission given the Associates to enter at reasonable times to make the necessary repairs to such sewer and water pipes as may be located upon the premises.

To avoid any misunderstanding between the parties to the sale as well as to furnish a memorandum for future reference, the Associates also require a "Memorandum of Sale" executed in duplicate stating the following facts:

Date of purchase, house number, and street.

Net purchase price.

Cash paid in.

Amount of first mortgage and name of mortgagee.

Amount of second mortgage and name of mortgagee.

The occupants of a house have the first opportunity of buying it, and not more than one house is sold to any one pur-

LABOR AND COMPENSATION

EMPLOYEE ENDING EMPLOYMENT		FIRST NAME	INITIAL	LAST NAME		NUMBER
THE ABOVE NAMED EMPLOYEE ENDED EMPLOYMENT IN						SHOULD RECEIVE PAY TO
DEPT.						
POSITION, OR KIND OF WORK						DO YOU ADVISE AGAINST RE-EMPLOYMENT IF SO STATE REASONS ON BACK OF THIS SHEET
REASON FOR LEAVING						DATE OF LEAVING
(1) LEFT OF OWN ACCORD		(2) DISCHARGED		(3) Laid OFF		LENGTH OF SERVICE
IMAGES		CARELESS		(3) Laid OFF		USES INTOXICANTS
HEAVY, WET, DUTY		LAZY		PHYSICAL REASONS		NO
ILL HEALTH		INCOMPETENT		TEMPORARILY EMPLOYED		SOME
SEDENTARY		UNRELIABLE		(4) UNFORWARDABLE		BUTCH
FAMILY MOVING		LIQUOR				CHARACTER OF SERVICE
HOUSING CONDITIONS		TROUBLE BREEDER		MARRIED (FEMALE)		SUPERIOR
UNKNOWN		SUBORDINATE		PENSIONED OR SUPERANNUATED		EXCELLENT
		DISCONDUCT		DEATH		GOOD
				EXTERNAL CAUSES		FAIR
				OCCUPATIONAL CAUSE		UNSATISFACTORY
						NOTES
SIGNED				SIGNED AND APPROVED		
FOREMAN				SUPERINTENDENT EMP. DEPT.		

EMPLOYEE ENDING EMPLOYMENT—L. BAMBERGER & CO.

CHECK NO. _____ Age _____ Date _____ 191

Please pay to _____ Dept. _____

Wages for week ending _____

Dept. Head _____

Left _____ Discharged _____

Cause _____

Empl. Agt. _____

This slip must be signed by Employment Agt. if employee is leaving

LEAVING NOTICE—DENNISON MFG. CO.

A receipt for wages in full is endorsed on the back

EMPLOYMENT FORMS

433

WALWORTH MFG. CO.		DISCHARGE VOUCHER						
Name		Clock No.		Dept.				
Occupation								
Discharge to take effect from		A. M.		19				
Date of this Voucher		19		Foreman				
Approved		Supt.		Works Manager				
TO BE FILLED IN BY THE COST DEPARTMENT	Due on pay roll of previous week		DAY WORK		PIECE WORK		AGGREGATE	
	Earned this week up to hour of discharge		TIME	AMOUNT	TIME	AMOUNT	TIME	AMOUNT
	Plus Saturday afternoon allowance							
	Deduction for bad work and						Total	
							Net amount due	
Time, deductions and amounts are correct				Received the above amount in full for services to the date and hour previously named.				
Cost Dept. per Date								
Entered on Employee's Record Card.								
Cost Dept. per Date								
Foreman will note on the other side the reason for discharge								
<p style="text-align: center; margin-top: 0;">NOTICE FOR REMOVAL FROM PAY ROLL</p> <p style="margin-top: 10px;">Check No. Name</p> <p style="margin-top: 10px;">Date Effective Personnel Service Dept. No.</p> <p style="margin-top: 10px;">Department</p> <p style="margin-top: 10px;">Division</p> <p style="text-align: right; margin-top: 20px;">_____ Personnel Service Department</p>								

DISCHARGE NOTICES

Above: Walworth Mfg. Co. Below: Edison Companies

LEAVING ORDER	
Original _____	Date _____ 191
Name _____	Position _____
Dept. _____	
Date Leaving _____	
Pay to Date _____	
Employment Signature _____	Store Mgr. _____

LEAVING ORDER—WM. FILENE'S SONS CO.

This order is in triplicate, the third copy having space for remarks

DISCHARGE BLANK			
Dept. _____	No. _____	Date _____	191
Name _____			
Discharged	Laid off	Left	(cross out words not used)
Reason (in full) _____			

Record as Workman _____			
Other Remarks _____			

Foreman			
Sept.			

DISCHARGE BLANK—NEW ENGLAND CONFECTIONERY CO.

chaser. Owing to the extremely low figures at which the property is sold opportunity is offered for a purchaser to take the property on a speculative basis, thereby defeating the purpose of the Associates in making these sales. To prevent this, as well as to keep the property from falling into undesirable hands, an agreement is made in duplicate between the buyer and the Associates whereby if the buyer decides to sell within a period of three years from the date of purchase he shall first offer to sell the property back to the Associates for the same amount that he paid for it. This offer remains open fifteen days, and if not accepted by the Associates the owner may then offer the property in the open market.

The opportunity to acquire their homes under the plan outlined has been much appreciated by the employees of the Associates, and a large number of houses and lots have been sold to them in the past year.



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